

STAR Certification Results Report

City of Columbus, OH
Certified 4-STAR Community
December 2015



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The STAR Community Rating System

The STAR Community Rating System™ (STAR) is the nation's first comprehensive framework and certification program for evaluating community-wide sustainability, encompassing economic, environmental, and social performance measures.

Sustainability means different things to different people, so STAR provides a clear, data-driven approach to assessing communities' sustainability efforts. The STAR framework helps communities assess their efforts in key areas and define sustainability for themselves.

The rating system is maintained by STAR Communities, a nonprofit organization based in Washington, DC that works to advance a national framework to evaluate and certify sustainable communities in North America.

STAR was developed for local governments by local governments. Nearly two hundred volunteers representing fifty cities and counties, state and federal agencies, nonprofit organizations, national associations, universities, utilities, and private corporations contributed thousands of hours and diverse expertise to the development of the STAR Community Rating System. Experts served on steering, technical, and ad hoc committees, which led to the development of the framework, methodologies for measurement,

credits, and requirements for achieving and maintaining a STAR Community Rating.

To promote continuous improvement towards sustainability, STAR Communities has developed a certification program based off of the measures in the rating system. To apply for a STAR Community Rating, the town, city, or county government must be the primary applicant. Staff and/or representatives of the community fill out an online application by providing data on a variety of community sustainability indicators and coordinating data collection from both governmental agencies and community partners.

Communities choose the measures that they would like to report on and are not required to submit on all measures. This allows local governments to report on the objectives that are most important and relevant to their communities.

Once the community submits the completed application forms, STAR Communities' verification teams reviews and verifies all measures for accuracy and then assigns a rating based upon a total cumulative score of points. A STAR Community Rating lasts for four years after the certification date.

Goal Area	Purpose and Intent
Built Environment	Achieve livability, choice, and access for all where people live, work, and play
Climate & Energy	Reduce climate impacts through adaptation and mitigation efforts and increase resource efficiency
Education, Arts & Community	Empower vibrant, educated, connected, and diverse communities
Economy & Jobs	Create equitably shared prosperity and access to quality jobs
Equity & Empowerment	Ensure equity, inclusion, and access to opportunity for all citizens
Health & Safety	Strengthen communities to be healthy, resilient and safe places for residents and businesses
Natural Systems	Protect and restore the natural resource base upon which life depends

Table 1: The Rating System is divided into seven thematic sustainability goal areas



The STAR Framework & Evaluation Measures

The STAR Community Rating System is built on a framework of sustainability goals, objectives, and evaluation measures. Version 1.2 of the Rating System contains seven sustainability goals. Under each goal, there are between five and seven objectives. These forty-four objectives are the core areas that contain evaluation measures and metrics.

Built Environment	Climate & Energy	Economy & Jobs	Education, Arts & Community	Equity & Empowerment	Health & Safety	Natural Systems
Ambient Noise & Light	Climate Adaptation	Business Retention & Development	Arts & Culture	Civic Engagement	Active Living	Green Infrastructure
Community Water Systems	Greenhouse Gas Mitigation	Green Market Development	Community Cohesion	Civil & Human Rights	Community Health & Health System	Invasive Species
Compact & Complete Communities	Greening the Energy Supply	Local Economy	Educational Opportunity & Attainment	Environmental Justice	Emergency Prevention & Response	Natural Resource Protection
Housing Affordability	Industrial Sector Resource Efficiency	Quality Jobs & Living Wages	Historic Preservation	Equitable Services & Access	Food Access & Nutrition	Outdoor Air Quality
Infill & Redevelopment	Resource Efficient Buildings	Targeted Industry Development	Social & Cultural Diversity	Human Services	Indoor Air Quality	Water in the Environment
Public Spaces	Resource Efficient Public Infrastructure	Workforce Readiness		Poverty Prevention & Alleviation	Natural & Human Hazards	Working Lands
Transportation Choices	Waste Minimization				Safe Communities	

Table 2: Version 1.2 of the STAR framework of goals and objectives

STAR objectives are achieved through attainment of two types of evaluation measures: community level outcomes and local actions. Community level outcomes are measurable condition-level indicators that depict a community's progress toward a preferred state or condition within the STAR objective it supports. Outcomes are represented as trend lines, targets, or thresholds in the rating system. Examples include reductions in energy use or increased transportation access.

Local actions describe the range of decisions and investments that a local government or community can make, or the activities that they can engage in, that are essential to making progress within objectives. Local actions in the rating system focus on the key interventions that move the needle towards STAR's identified outcomes. Since many public, private, and non-profit organizations within the community contribute towards advancing sustainability goals, the rating system recognizes these efforts, not only those of the local government.

There are nine defined action types in the rating system. Preparatory actions are foundational steps that a community should take first to assess the community's needs and trends, identify and execute policy and regulatory changes, and strengthen partnerships and collaborations in order to effectively deploy resources and investments. Implementation actions are the programs and services, enforcement and incentive mechanisms, and infrastructure investments a community makes in order to efficiently and equitably move the needle towards the desired outcomes.



Columbus' STAR Journey

The City of Columbus started on the path to certification as one of the eight communities in the Spring 2015 Leadership STAR Community Program. The Leadership Program is a one-year all-inclusive package that provides extensive staff support and services to a cohort of communities as they perform their first baseline sustainability assessment under the STAR Community Rating System.

The Spring 2015 cohort was the fourth class of the Leadership Program, and included Abington Township, PA; Boise, ID; Cambridge, MA; Columbus, OH; Henderson, NV; Iowa City, IA; San Antonio, TX; and Steamboat Springs, CO.

Staff from the participating communities met in Washington, DC in March 2015 to receive an orientation and intensive training on the Rating System's measures, project management, certification, and how to communicate results. Paul Carson, the City's Technology Project Manager, and Erin Miller, Environmental Steward from the City, represented the community at the training and served as the chief project managers for the certification process.

Information and data was gathered for the certification application throughout 2015 with the

assistance of dozens of city staff members, the Ohio State University, community partners, state agencies, local and regional governments, and private sector employers.

Over the course of 2015, Columbus staff received regular technical support, such as monthly check-in calls with a dedicated STAR coordinator and quarterly networking calls with other Leadership participants.

In December 2015, the City of Columbus was awarded the Certified 4-STAR Community Rating for national excellence. The community received 405.8 points out of the available 720 points. The certification was under Version 1.2 of the Rating System. The City is the first 4-STAR Community in Ohio, and the 44th community nationwide to achieve certification from STAR Communities.

Columbus is the second Ohio community to achieve STAR certification, achieving the Certified 4-STAR Community Rating for national excellence in December 2015.



The Spring 2015 Leadership STAR Communities cohort at training in Washington, D.C.



Overview of Columbus' Score

Communities pursuing STAR certification accumulate points by demonstrating their achievements across seven goal areas. Each community chooses which measures to report on from a menu of over five hundred quantitative outcome and qualitative action measures. This allows local governments to report on the measures that are most important and relevant to their communities. STAR Communities performs a rigorous third party verification of each application to ensure conformity with national standards and best practices before certifying a community.

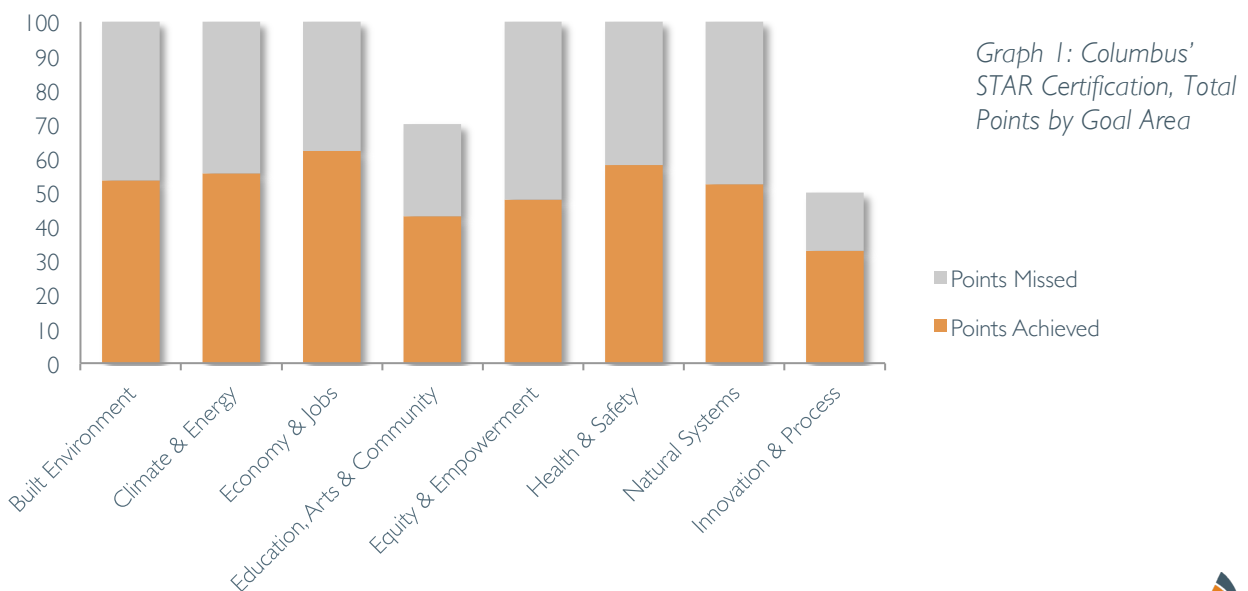


There are three STAR certification levels: 3-STAR Community (200-399 points), 4-STAR Community (400-599 points), and 5-STAR Community (600+ points).

On December 15, 2015, Columbus received a Certified 4-STAR Community Rating by earning 405.8 points under Version 1.2 of the Rating System. The chart below illustrates Columbus' high performance, especially within the Economy & Jobs and Education, Arts & Community goal areas. Other goal areas, such as Equity & Empowerment, offer opportunity for improvement.

Goal Area	Points Achieved	Points Missed	Points Available	Percent Achieved
Built Environment	53.6	46.4	100	54%
Climate & Energy	55.6	44.4	100	56%
Economy & Jobs	62.2	37.8	100	62%
Education, Arts & Community	43.0	27.0	70	61%
Equity & Empowerment	47.9	52.1	100	48%
Health & Safety	58.1	41.9	100	58%
Natural Systems	52.4	47.6	100	52%
Innovation & Process	33.0	17.0	50	66%
Totals	405.8	314.2	720	56%

Table 3: Columbus' STAR Certification Final Score by Goal Area



National Context for Columbus' Score

Over one hundred communities have signed up as STAR members, and as of August 2016, fifty-two have achieved STAR certification. Out of the fifty-two certified communities, four are 5-STAR communities, twenty are 4-STAR communities, and twenty-eight are 3-STAR communities.

Columbus' score fell just over the mark to become a 4-STAR Community. Columbus' STAR certification is a testament to the City's commitment to creating a better community for all of its citizens and will serve as an important benchmark from which to move forward.

5-STAR COMMUNITIES

- Baltimore, MD
- Cambridge, MA
- Northampton, MA
- Seattle, WA

- Steamboat Springs, CO
- Tacoma, WA
- Tucson, AZ
- Washington, DC

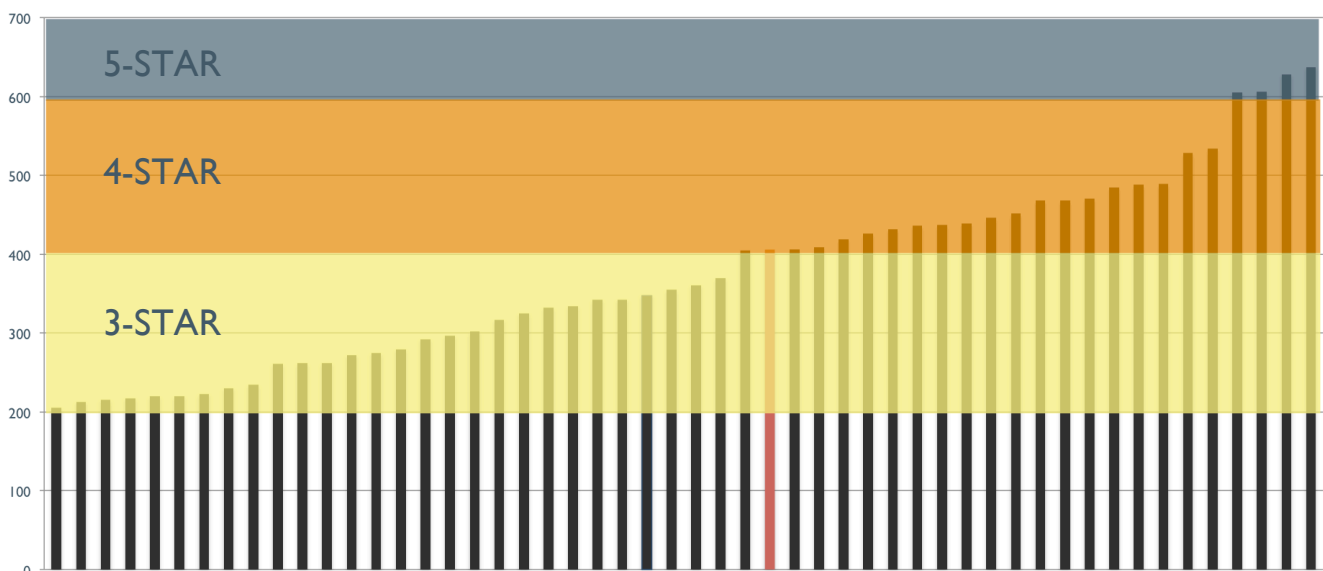
- Monroe County, FL
- Palm Bay, FL
- Park Forest, IL
- Phoenix, AZ
- Reading, PA
- Riverside, CA
- Rosemount, MN
- San Antonio, TX
- St. Louis, MO
- Wichita, KS
- Woodbridge, NJ

4-STAR COMMUNITIES

- Austin, TX
- Boise, ID
- Broward County, FL
- Burlington, VT
- Columbus, OH
- Davenport, IA
- Dubuque, IA
- Evanston, IL
- Henderson, NV
- Iowa City, IA
- Las Vegas, NV
- Louisville, KY
- Memphis/Shelby County, TN
- Plano, TX
- Portland, OR
- Raleigh, NC

3-STAR COMMUNITIES

- Abington Township, PA
- Albany, NY
- Atlanta, GA
- Beaverton, OR
- Birmingham, AL
- Blue Island, IL
- Chandler, AZ
- Charles City, IA
- Cleveland, OH
- Des Moines, IA
- El Cerrito, CA
- Fayetteville, AR
- Fort Collins, CO
- Houston, TX
- Indianapolis, IN
- Las Cruces, NM
- Lee County, FL



Graph 2: Final scores of all Certified Communities as of August 2016. Columbus' comparative ranking is shown in red.



Comparative Analysis of Columbus' Score

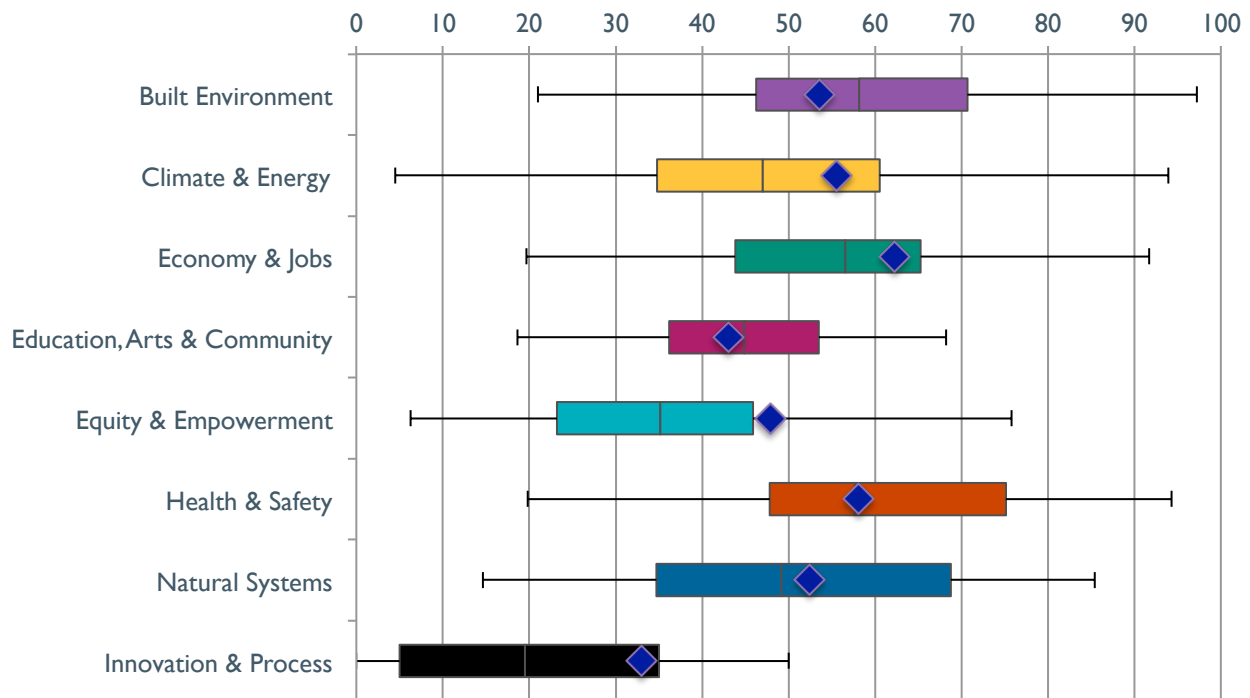
A closer examination of Columbus' point totals in each goal area compared to other certified communities reveals areas of strong performance as well as opportunities for improvement. The box-and-whisker graph below illustrates how Columbus performed in each goal area relative to all other certified communities.

The box-and-whisker graph is divided into quartiles, with the middle division representing the median score and the outer ends on the "whiskers" representing the lowest and highest score. The section from the end of the whisker on the low end to the beginning of the box represents the 25th percentile, the first half of the box represents scores from the 25th-50th percentile, the second half of the box represents score from the 50th-75th percentile and the whisker on higher end represents scores in

the 75th-100th percentile. The smaller the box is, the closer the distribution of scores. A longer box indicates that the scores are more dispersed.

In general, Columbus' goal area scores tended to hover around the 50th percentile mark. Comparatively speaking, the City performed better than most communities by receiving a score in the top 25th percentile in Equity & Empowerment, a goal area where most communities tend to have trouble. The City also scored highly in Innovation & Process.

The next section will go a step further by breaking down each goal area and looking at the City's performance in the forty-four STAR objectives.



Graph 3: Comparative analysis of Columbus' goal area scores. The blue diamonds indicate Columbus' score in each goal area. The colored boxes represent the 25th-75th percentile of all certified communities' scores.





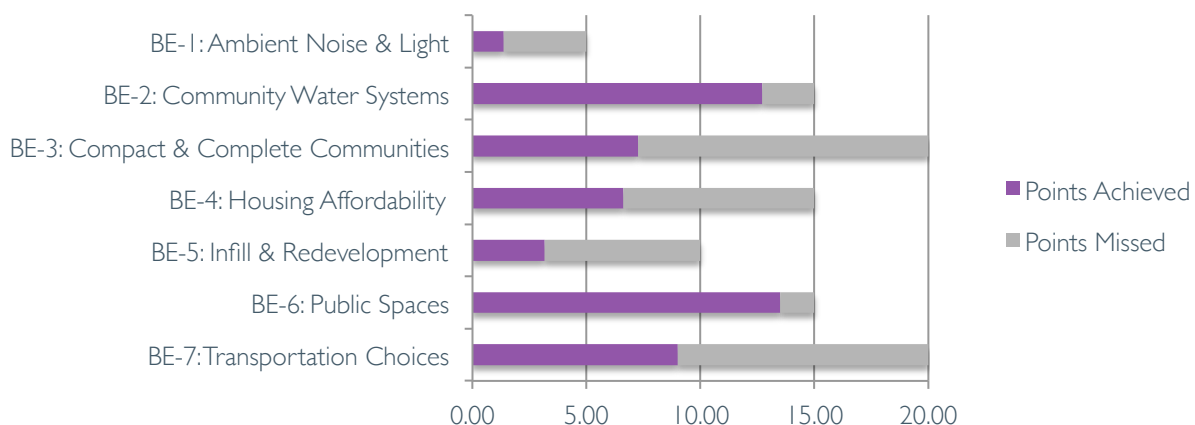
BUILT ENVIRONMENT Overview

The seven objectives in the Built Environment goal area evaluate community development patterns, livability, and design characteristics, with an emphasis on access and choice for all residents regardless of income.

OBJECTIVE	PURPOSE & INTENT	AVAILABLE POINTS
BE-1	Ambient Noise & Light: Minimize and manage ambient noise and light levels to protect public health and integrity of ecological systems	5
BE-2	Community Water Systems: Provide a clean and secure water supply for all local users through the management of potable water, wastewater, stormwater, and other piped infrastructure	15
BE-3	Compact & Complete Communities: Concentrate development in compact, human-scaled, walkable centers and neighborhoods that connect to transit, offer diverse uses and services, and provide housing options for families of all income levels	20
BE-4	Housing Affordability: Construct, preserve, and maintain an adequate and diverse supply of location-efficient and affordable housing options for all residents	15
BE-5	Infill & Redevelopment: Focus new growth in infill areas and on redevelopment that does not require the extension of water, sewer, and road infrastructure or facilitate sprawl	10
BE-6	Public Spaces: Create a network of well-used and enjoyable parks and public spaces that feature equitable, convenient access for residents throughout the community	15
BE-7	Transportation Choices: Promote diverse transportation modes, including walking, bicycling, and transit, that are safe, low-cost, and reduce vehicle miles traveled	20

Table 4: Objectives within Built Environment and their associated points.

Columbus achieved 53.6 out of the 100 total available points in this goal area, scoring highly in BE-2: Community Water Systems and BE-6: Public Spaces. There is opportunity for improvement in all areas, especially in BE-3: Compact & Complete Communities; BE-4: Housing Affordability; and BE-5: Infill & Redevelopment.



Graph 4: Columbus' Built Environment performance by objective.





BUILT ENVIRONMENT

Objective Analysis

BE-1: AMBIENT NOISE & LIGHT

1.4/5 points

Columbus did not pursue any of the three outcome measures in this objective, which ask for a community to measure and meet thresholds for ambient noise levels in commercial areas and to demonstrate progress towards locally designated light targets. Credit was received for existing community noise and light ordinances that set standards for designated areas.

To improve, the community could continually track noise and light readings in target areas, keep a database of noise complaints, and enforce noise and light standards.

BE-2: COMMUNITY WATER SYSTEMS

12.7/15 points

Credit was received for the two outcomes that ask communities to demonstrate compliance with EPA standards for drinking water quality and stormwater management. No data was submitted for the other two outcomes, which ask about secure water supply and safe wastewater management. The City received credit for nine of the eleven action measures in this objective, including the implementation of the *Low Income Water and Sewer Discount Program*, which provides a 20% discount to over 17,000 participants.

The City could consider adopting a jurisdiction-wide drinking water and wastewater management plan and shift towards a full cost pricing system to further progress in this objective.

BE-3: COMPACT & COMPLETE COMMUNITIES

7.3/20 points

In this objective, STAR asks that communities identify a number of physical locations within the community to analyze as compact and complete communities (defined as walkable ½ mile areas with a variety of uses and transit accessibility). Columbus did not opt to perform the spatial analysis required for the outcomes. However, the City did receive credit for four action measures by providing support and incentives for affordable housing and identifying areas for compact development on the future land use map.

Moving forward, there are several steps that could be taken to make progress in this objective. Columbus could add language that supports compact, mixed-use development to the comprehensive plan, incentivize compact development, and require walkability standards for all new development.

BE-4: HOUSING AFFORDABILITY

6.6/15 points

No data was submitted for the three outcome measures that ask communities to show increased production of new affordable housing units, preservation of existing affordable housing, and that most households spend less than 45% of their income on housing and transportation combined.

The Affordable Housing Trust supports this objective by helping citizens find a path to homeownership, while the *Rental Housing Production and Preservation Program* assisted over 1,100 housing units between 2012 and 2015. To better their score, the City could develop and adopt a comprehensive housing strategy.





BUILT ENVIRONMENT

Objective Analysis, continued

BE-5: INFILL & REDEVELOPMENT

3.2/10 points

Neither of the two outcome measures in the Infill & Redevelopment objective were pursued. The outcome measures ask communities to demonstrate an increase in new development in locally designated infill areas, and to show that at least 75% of new housing units built in the past three years utilize existing infrastructure.

There are several steps the City could take to improve in this goal area. The first step would be to conduct an inventory and priority list of existing infill and brownfield sites. This can help potential developers identify areas that are prime for redevelopment. Additionally, the City could adopt design regulations to encourage mixed-use developments in designated infill areas.

BE-6: PUBLIC SPACES

13.5/15 points

Public Spaces was the highest scoring objective within the Built Environment goal area. The City received credit in three of the four outcome measures by demonstrating that there are 14.7 acres of parkland per 1,000 residents, 92.4% of households are within three miles of an off-road

trail, and that over 80% of residents visit a park at least once a year. The City also received credit for seven of the ten action measures, such as the adoption of the *2014 Columbus Recreation and Parks Master Plan* and the *Parkland Dedication Ordinance*, which guarantees equitable development of and access to parkland.

BE-7: TRANSPORTATION CHOICES

9.0/20 points

Columbus did not pursue any of the three outcome measures that ask communities to meet certain thresholds for mode split and transportation affordability, and to demonstrate that they are on track to reach zero bicycle or pedestrian fatalities by 2040.

However, the City demonstrated that work is being done to improve in this objective by receiving credit for six out of the ten action measures. In 2015, the *Active Transportation Plan* was adopted with the goal of helping residents to easily move about the community as pedestrians, bicyclists, and via public transit. Columbus has also worked with the *Mid-Ohio Regional Planning Commission* to increase household access to transit by over 15% between 2010 and 2015.

BUILT ENVIRONMENT HIGHLIGHTS:

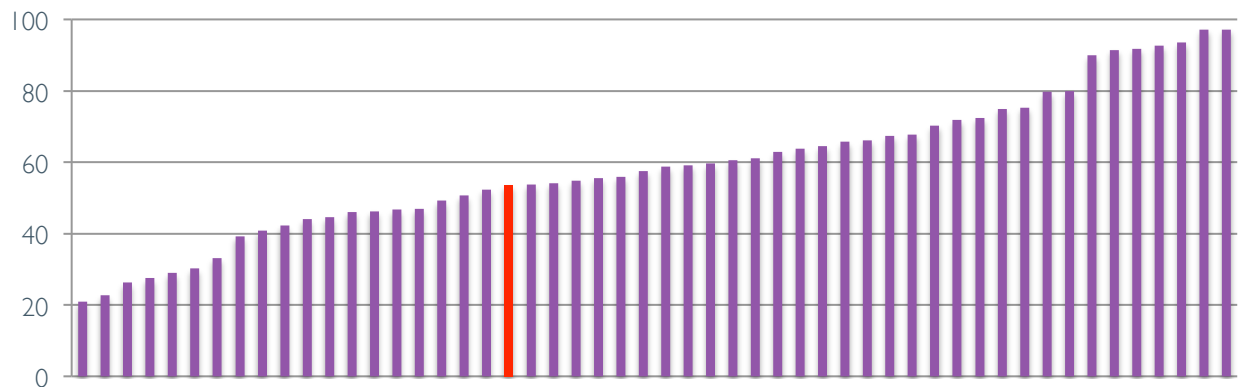
- **20%** discount on water and wastewater services provided to over 17,000 customers
- **92.4%** of household are within three miles of an off-road trail
- **15%** increase in household access to transit between 2010 and 2015
- The Rental Housing Production and Preservation Program assisted over **1,100 housing units** between 2012 and 2015



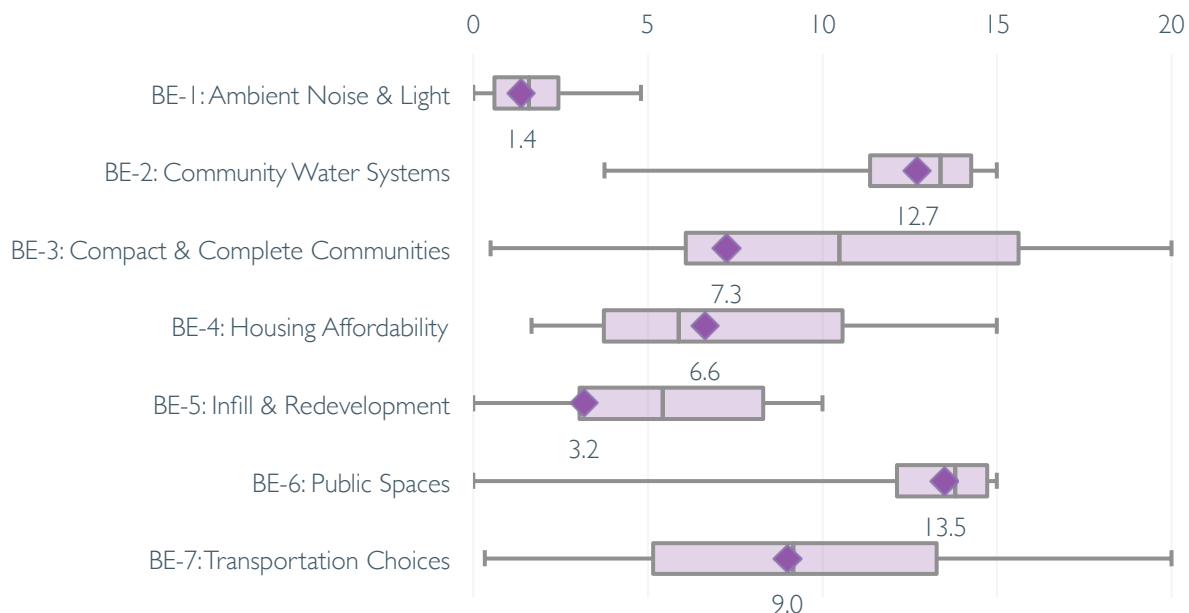


BUILT ENVIRONMENT Comparative Analysis

The graphs below show how Columbus' Built Environment total score and objective scores compare to those from other certified communities. Columbus fell within the median point range for all objectives. The only objective where Columbus scored over the 50th percentile mark is BE-4: Housing Affordability, an objective in which many communities struggle. Columbus' highest point score came from BE-2: Community Water Systems, yet the city is just below the 50th percentile mark, as this is an objective in which many communities score well. Across the board, there is plenty of opportunity for improvement.

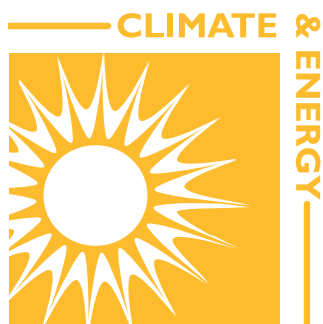


Graph 5: Columbus' Built Environment total score in red, as compared to all Certified STAR Communities.



Graph 6: Columbus' objective scores for the Built Environment, as indicated by diamonds, overlaid on top of the combined percentile scores of all certified communities.





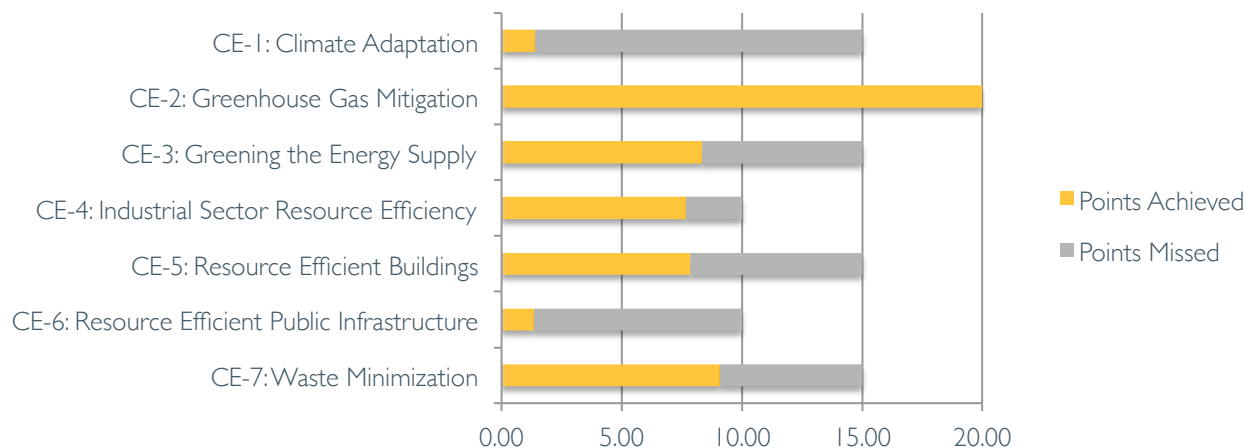
CLIMATE & ENERGY Overview

The seven objectives in STAR's Climate & Energy goal area aim to reduce climate impacts and increase resource efficiency in order to create safer and healthier communities.

OBJECTIVE	PURPOSE & INTENT	AVAILABLE POINTS
CE-1	Climate Adaptation: Strengthen the resilience of communities to climate change impacts on built, natural, economic, and social systems	15
CE-2	Greenhouse Gas Mitigation: Achieve greenhouse gas emissions reductions throughout the community	20
CE-3	Greening the Energy Supply: Transition the local energy supply for both transportation and non-mobile sources toward the use of renewable, less carbon-intensive, and less toxic alternatives	15
CE-4	Industrial Sector Resource Efficiency: Minimize resource use and demand in the industrial sector as a means to mitigate greenhouse gas emissions and conserve water	10
CE-5	Resource Efficient Buildings: Improve the energy and water efficiency of the community's residential, commercial, and institutional building stock	15
CE-6	Resource Efficient Public Infrastructure: Minimize resource use and demand in local public infrastructure as a means to mitigate greenhouse gas emissions and conserve water	10
CE-7	Waste Minimization: Reduce and reuse material waste produced in the community	15

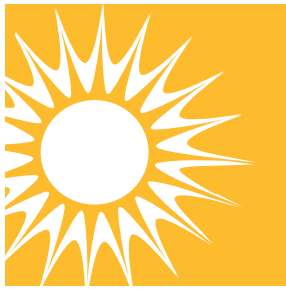
Table 5: Objectives within Climate & Energy and their associated points.

Columbus achieved 55.6 out of the 100 total available points in the Climate & Energy goal area. The City did very well in CE-2: Greenhouse Gas Mitigation, receiving full credit for the objective. High point scores were also achieved in CE-3: Greening the Energy Supply; CE-4: Industrial Sector Resource Efficiency; and CE-7: Waste Minimization. There is room for improvement in CE-1: Climate Adaptation and CE-6: Resource Efficient Public Infrastructure.



Graph 7: Columbus' Climate & Energy performance by objective.





CLIMATE & ENERGY

Objective Analysis

CE-1: CLIMATE ADAPTATION

1.4/15 points

The outcome measure asks for communities to demonstrate a reduction in vulnerability to locally identified climate adaptation concerns. While Columbus did not submit data for the outcome, they did identify several local climate adaptation concerns, including water resources, biodiversity, stormwater infrastructure, and shifting growing seasons for agriculture.

The City did receive credit by completing action measures that support this objective, including the *Sustaining Scioto* plan that was adopted in 2015 and evaluates and prepares for the anticipated effects of climate change on water supply in the Upper Scioto River watershed.

Moving forward, Columbus could take a more direct approach to climate adaptation by incorporating adaptation requirements into zoning and codes and upgrading public facilities.

CE-2: GREENHOUSE GAS MITIGATION

20/20 points

Columbus received full credit in the CE-2 objective by demonstrating a 14% reduction in community-wide greenhouse gas emissions between 2013 and 2014.

This achievement is supported by efforts such as *The Columbus Green Community Plan*, which supports GHG reductions. Other actions include a Green Team that advises the Mayor's Office on sustainability issues, policies like the energy efficiency code, and the *Green Fleet Action Plan*.

CE-3: GREENING THE ENERGY SUPPLY

8.3/15 points

Columbus earned partial credit on one outcome measure by demonstrating increased ownership of alternative fuel vehicles. The City also received credit for actions such as the *Green Fleet Action Plan*, which has already exceeded its targets for petroleum reduction.

To improve further, the City could adopt a community-wide plan to adopt renewables and provide incentives and support for alternative and renewable energy infrastructure.

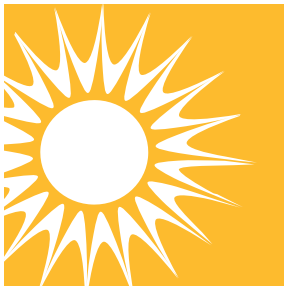
CE-4: INDUSTRIAL SECTOR RESOURCE EFFICIENCY

7.6/10 points

This objective focuses on industrial operations, which are defined as processes used to transform resources into goods, including manufacturing, construction, energy production, and agriculture. The outcome measures in CE-4 ask for a community to demonstrate energy and water efficiency increases within the industrial sector. Columbus received credit for one of the two outcome measures by demonstrating a 10.7% reduction in industrial sector energy use between 2012 and 2014.

Programs like the *Columbus Energy Challenge*, which has registered 81 buildings representing 15 million square feet with ENERGY STAR, help to support and track energy use reductions. To improve, the City could establish better data collection policies, regulations, and codes to help local industries reduce energy and water use, and work with industrial leaders to set targets and develop strategies for resource efficiency.





CLIMATE & ENERGY

Objective Analysis, continued

CE-5: RESOURCE EFFICIENT BUILDINGS

7.9 /15 points

This objective focuses on improving the energy and water efficiency of the community's residential, commercial, and institutional building stock. Columbus received credit for one of the outcome measures by demonstrating a slight increase in the number of certified green buildings within the community.

This objective is supported through actions such as the *Green Columbus Fund*, which provides incentives for green buildings. In addition, the *Community Assistance Program* offered by AEP helps qualifying properties with energy efficiency upgrades.

To improve and consolidate efforts, the City could adopt a resource efficiency plan to target and improve water and energy efficiency in the community.

CE-6: RESOURCE EFFICIENT PUBLIC INFRASTRUCTURE

1.3/10 points

CE-6 deals with resource use in local public infrastructure, such as landfills, power plants,

public transit systems, waste and water facilities, and streetlights and traffic signals. The City only applied for credit in two action measures in this objective. The City's *Green Memo III* establishes that new and renovated city buildings will be LEED-certified and demonstrated that city staff actively work across departments to report local government GHG emissions.

Moving forward, the City could work with all departments that deal with infrastructure to develop a resource efficiency plan and to consider resource efficiency in all infrastructure projects.

CE-7: WASTE MINIMIZATION

9.1/15 points

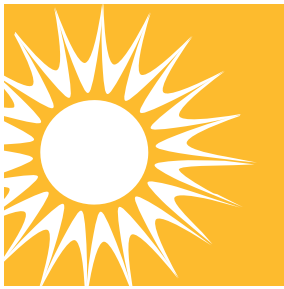
The City did not submit data for the outcome measure, which asks communities to show progress towards a 100% reduction in solid waste by 2050. Columbus did receive credit for completing seven of the nine available action measures, including actions such as the *SWACO Waste Management Plan*, a pilot curbside recycling project on High Street, and the *Green Purge* event.

To reduce waste further, the City could adopt specific product bans and work with a regional coalition to reduce waste.

CLIMATE & ENERGY HIGHLIGHTS:

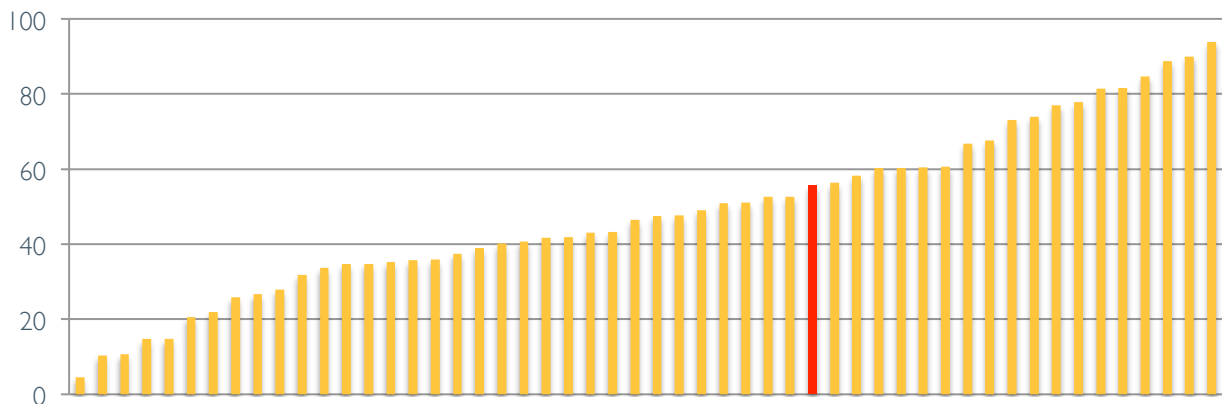
- **8.5%** reduction in city petroleum use between 2008 and 2013, exceeding the target of 5% by 2014
- A **14%** reduction in community-wide greenhouse gas emissions between 2013 and 2014



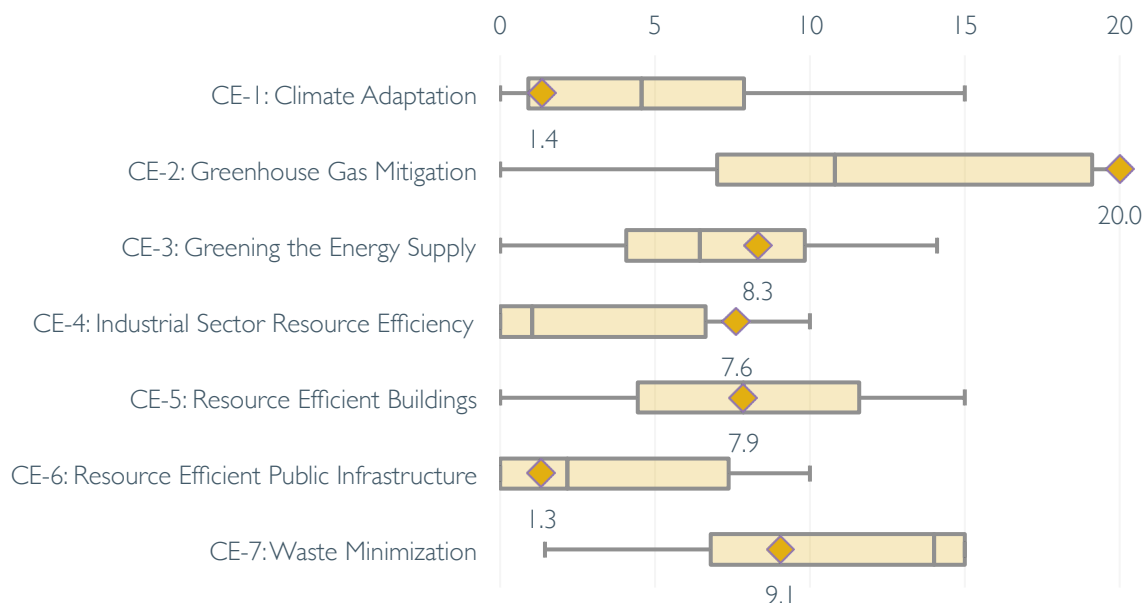


CLIMATE & ENERGY Comparative Analysis

The graphs below show how Columbus' Climate & Energy total score and objective scores compare to those from other certified communities. The City's objective scores for CE-2: Greenhouse Gas Mitigation and CE-4: Industrial Sector Resource Efficiency fell in the top 25th percentile of all certified communities. Columbus did not fall in the bottom 25th percentile for any of the objectives, but there is plenty of room for improvement, especially in CE-1: Climate Adaptation and CE-6: Resource Efficient Public Infrastructure.



Graph 8: Columbus' Climate & Energy total score in red, as compared to all Certified STAR Communities.



Graph 9: Columbus' objective scores for Climate & Energy, as indicated by diamonds, overlaid on top of the combined percentile scores of all certified communities.





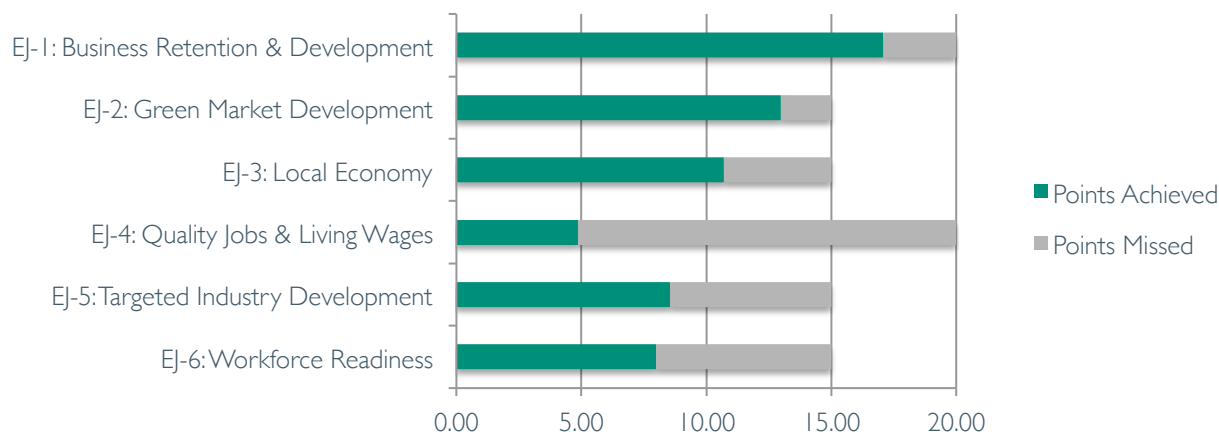
ECONOMY & JOBS Overview

The six objectives of STAR's Economy & Jobs goal area work together to promote equitably shared prosperity and access to quality jobs.

OBJECTIVE	PURPOSE & INTENT	AVAILABLE POINTS
EJ-1	Business Retention & Development: Foster economic prosperity and stability by retaining and expanding businesses with support from the business community	20
EJ-2	Green Market Development: Increase overall market demand for products and services that protect the environment	15
EJ-3	Local Economy: Create an increasingly self-reliant community through a robust local economy with benefits shared by all	15
EJ-4	Quality Jobs & Living Wages: Expand job opportunities that support upward economic mobility and provide sufficient wages so that working people and their families can afford a decent standard of living	20
EJ-5	Targeted Industry Development: Increase local competitiveness by strengthening networks of businesses, suppliers, and associated institutions	15
EJ-6	Workforce Readiness: Prepare the workforce for successful employment through increasing attainment of post-secondary education and improving outcomes of workforce development programs	15

Table 6: Objectives within Economy & Jobs and their associated points.

Columbus achieved 62.2 out of the available 100 points for Economy & Jobs, the City's highest scoring goal area. The City performed exceptionally well in EJ-1: Business Retention & Development; EJ-2: Green Market Development; and EJ-3: Local Economy. There is opportunity for improvement in all other objectives, especially EJ-4: Quality Jobs & Living Wages.



Graph 10: Columbus' Economy & Jobs performance by objective.





ECONOMY & JOBS

Objective Analysis

EJ-1: BUSINESS RETENTION & DEVELOPMENT

17.1/20 points

Columbus received credit in two of the three outcome measures by demonstrating an increase in employment and the number of local businesses established in recent years. Several actions also support this objective; for example the *Columbus 2020!* partnership is a regional effort to develop the economy with a target of 150,000 jobs and \$8 billion dollars of investment by 2020.

Some strategies the City could consider moving forward are utilizing tax-based incentives to retain businesses, negotiating local hiring agreements, and providing direct training to meet the needs of local businesses.

EJ-2: GREEN MARKET DEVELOPMENT

12.9/15 points

Columbus received full credit in Outcome 1 by demonstrating a 17.5% decrease in GHG intensity over time, and in Outcome 2 by showing a small increase in the construction of green buildings. Partial credit was awarded in Outcome 4 by demonstrating an increase in alternative fuel vehicle ownership.

The City is leading by example by adopting the *Environmentally Preferable Purchasing Code*, a green purchasing policy. To improve in this objective, the City could consider adding a green market development component to its economic development plan and auditing or removing any zoning measures that make it difficult to establish green businesses.

EJ-3: LOCAL ECONOMY

10.7/15 points

Columbus met the thresholds for both outcome measures by showing that 52% of import sectors have increasing location quotients over the past three years and that deposits to local financial institutions have increased 13.6% over the past three years. This strong performance is supported by a preferential purchasing policy for local products and marketing campaigns like *Think Columbus First*, which promote buying local.

To improve, the City could perform an assessment of the local economy to identify where attention and resources are most needed.

EJ-4: QUALITY JOBS & LIVING WAGES

4.9/20 points

Columbus did not submit data for either of the two outcome measures in EJ-4, which ask communities to increase real median household income over time and demonstrate that 80% of households meet or exceed the local living wage standard.

The City received credit for supporting living wage campaigns in the community, implementing family-friendly workplace policies for government employees, and maintaining a collective bargaining agreement with local government workers.

There are several steps the City could consider to improve, such as adopting a living wage policy and aligning local economic development strategies with workforce development programs.





ECONOMY & JOBS

Objective Analysis, continued

EJ-5: TARGETED INDUSTRY DEVELOPMENT

8.6/15 points

In EJ-5, a community must identify three targeted industries to focus on in the objective. Columbus identified retail trade, wholesale trade, and professional scientific and technical services as targeted industries in which to demonstrate progress for the outcome measures. All three targeted industries showed an increase in the number of sales; retail trade and professional scientific and technical services showed an increase in the number of businesses; and retail trade and wholesale trade showed an increase in the number of employees in the three years of the reporting period. *The Columbus Region: Factbook 2015*, a local economic analysis, was the only action measure submitted.

There are several additional steps that can be taken to improve in this objective. The City could conduct market studies on the targeted industries, work with regional networks in the targeted industry sectors, and work with the targeted industries to provide incentives and capacity building services.

EJ-6: WORKFORCE READINESS

8.0/15 points

Columbus received credit for one of the two outcome measures by demonstrating a marginal increase in post-secondary educational attainment between 2009 and 2013. There was a 0.1% increase in associate degrees, a 0.3% increase in bachelor degrees, and a 0.3% increase in graduate and/or professional degrees over the past three years. Support for regional workforce development is laid out in the *Columbus Region Comprehensive Economic Development Strategy*, adopted in 2014.

In the future, Columbus could align economic development goals with workforce training programs and require that government contractors hire local residents.

ECONOMY & JOBS HIGHLIGHTS:

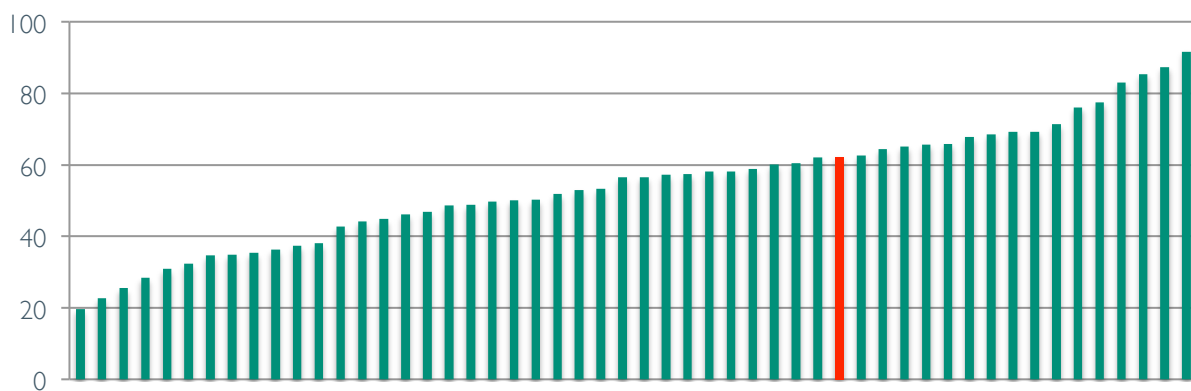
- **17.5%** decrease in Greenhouse Gas Intensity since 2013
- Deposits to local financial institutions increased **13.6%** over the past three years
- **Increase in post-secondary degrees** across the board from between 2009 and 2013



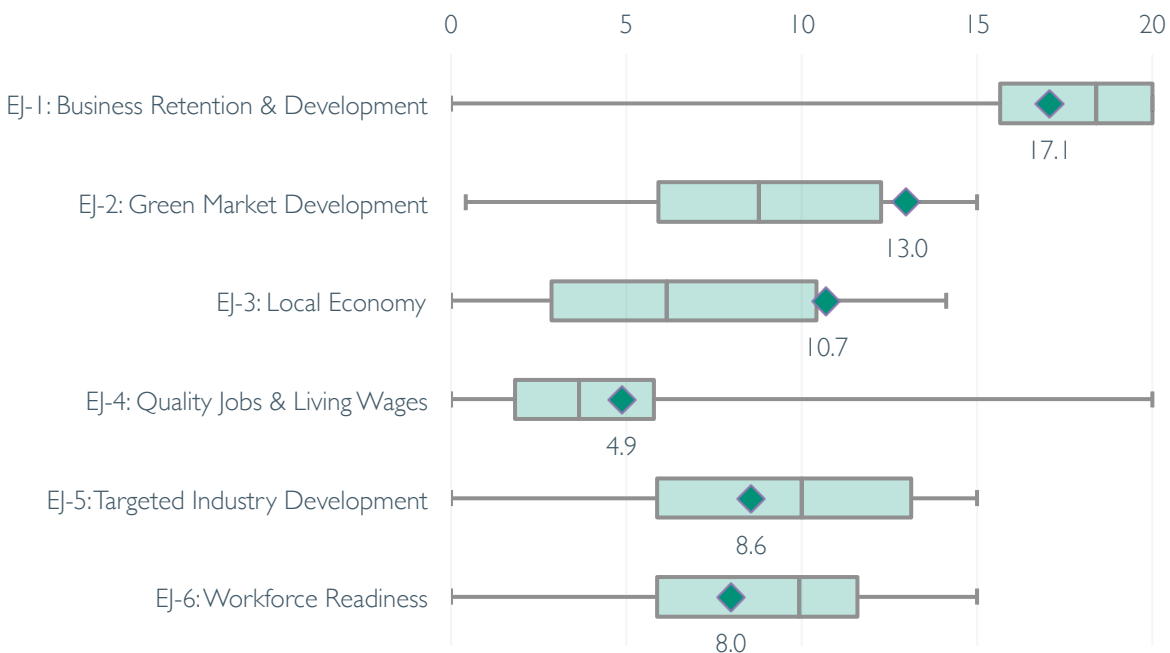


ECONOMY & JOBS Comparative Analysis

The graphs below show how Columbus' Economy & Jobs total score and objective scores compare to those from other certified communities. Columbus fell in the top 25th percentile for EJ-2: Green Market Development and EJ-3: Local Economy. In EJ-4: Quality Jobs & Living Wages, an area that communities often score low in, Columbus is in the top 50th percentile even with a seemingly low score of 4.9 out of 20. There is room to improve in all objectives.



Graph 11: Columbus' Economy & Jobs total score in red, as compared to all Certified STAR Communities.



Graph 12: Columbus' objective scores for Economy & Jobs, as indicated by diamonds, overlaid on top of the combined percentile scores of all certified communities.





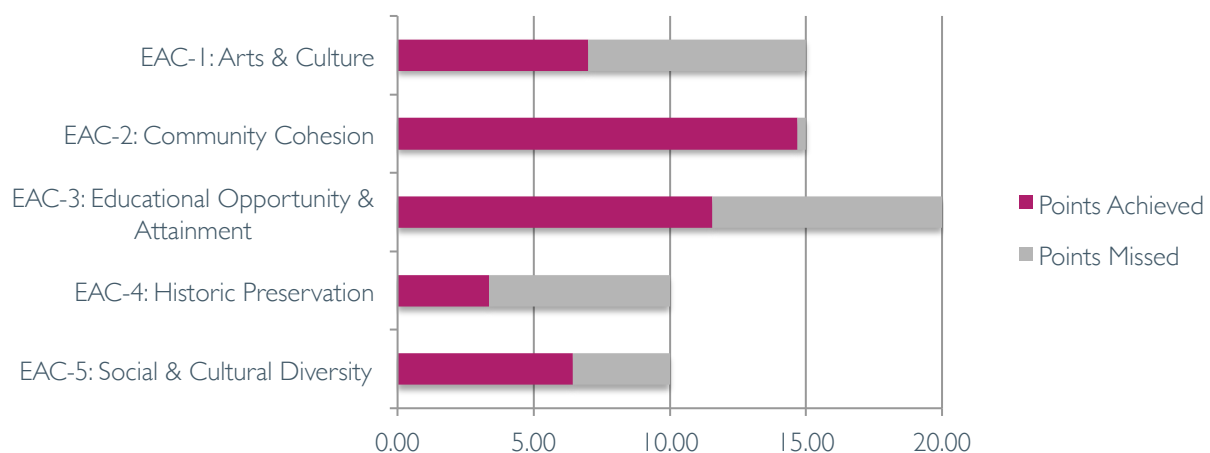
EDUCATION, ARTS & COMMUNITY Overview

The five objectives of STAR's Education, Arts & Community goal area promote an educated, cohesive, and socially connected community.

OBJECTIVE	PURPOSE & INTENT	AVAILABLE POINTS
EAC-1	Arts & Culture: Provide a broad range of arts and cultural resources and activities that encourage participation and creative self-expression	15
EAC-2	Community Cohesion: Ensure a cohesive, connected community through adequate venues for community interaction, community building activities and events, and the sharing of information about community issues and services	15
EAC-3	Educational Opportunity & Attainment: Achieve equitable attainment of a quality education for individuals from birth to adulthood	20
EAC-4	Historic Preservation: Preserve and reuse historic structures and sites to retain local, regional, and national history and heritage, reinforce community character, and conserve resources	10
EAC-5	Social & Cultural Diversity: Celebrate and respect diversity and represent diverse perspectives in community decision-making	10

Table 7: Objectives within Education, Arts & Community and their associated points.

Columbus achieved 43.0 out of the 70 possible points in Education, Arts & Community, which represents 61% of the available points. The City performed especially well in EAC-2: Community Cohesion. There is plenty of opportunity for improvement in all other objectives, especially EAC-4: Historic Preservation.



Graph 13: Columbus' Education, Arts & Community performance by objective.





EDUCATION, ARTS & COMMUNITY Objective Analysis

EAC-1: ARTS & CULTURE

7.0/15 points

Columbus did not meet the thresholds set for the two outcome measures in EAC-1, which look at the percentage of creative industry businesses in the community and local attendance to arts events and museums. The City supports arts and culture in a variety of ways, including the *Columbus Arts Commission*, which has approved 25 public arts installations since 2013; the *Greater Columbus Arts Council*, which supports over 25 organizations with grant funding; and the *Columbus Public Art fund* established in 2012.

EAC-2: COMMUNITY COHESION

14.7/15 points

EAC-2 is Columbus' highest scoring objective in the EAC goal area. The City received credit for one of the two outcomes by demonstrating that 99.7% of residents live within one mile of a community venue, which significantly exceeds STAR's 75% threshold. The City also received credit for nine of the ten action measures, including the *Neighborhood Pride* effort, the *Clintonville Neighborhood Plan*, and youth leadership programs like *YouthBuild*.

EAC-3: EDUCATIONAL OPPORTUNITY & ATTAINMENT

11.6/20 points

Columbus did not submit data for the outcome

measures, which ask communities to demonstrate progress in reading proficiency, graduation rates, and graduation rate equity, but did receive credit for seven of the eight action measures. These include initiatives such as the *Columbus Education Commission*, the *Columbus Council of PTAs*, and *S.O.A.R.hire!*, a youth work readiness program.

EAC-4: HISTORIC PRESERVATION

3.4/10 points

Columbus received credit for one outcome measure by demonstrating there are eighteen historic districts established in the City. Other historic preservation efforts include the *Columbus Register of Historic Properties*, the *Columbus Landmarks Foundation*, and zoning that protects historic districts. To improve, the City could adopt a historic preservation plan that could make the numerous ongoing efforts more focused

EAC-5: SOCIAL & CULTURAL DIVERSITY

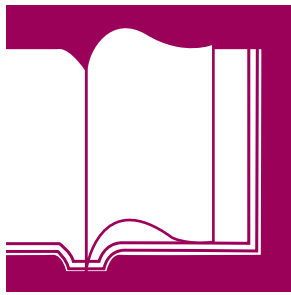
6.4/10 points

The City met one outcome measure by elaborating on the numerous cultural events hosted in the community. There are several action steps that could be taken to improve in this area, including conducting an assessment of the community's social and cultural diversity to help inform decisions, providing equity and diversity training to city employees, and adopting a policy that ensures diversity on local government boards.

EDUCATION, ARTS & COMMUNITY HIGHLIGHTS:

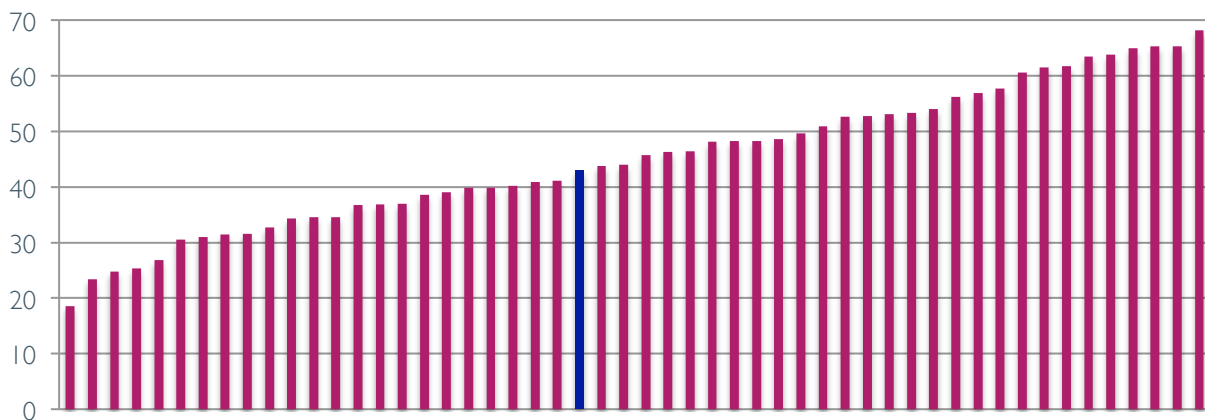
- **99.7%** of residents live within one mile of a community venue
- The City Arts Commission has approved **25** community art installations since 2013



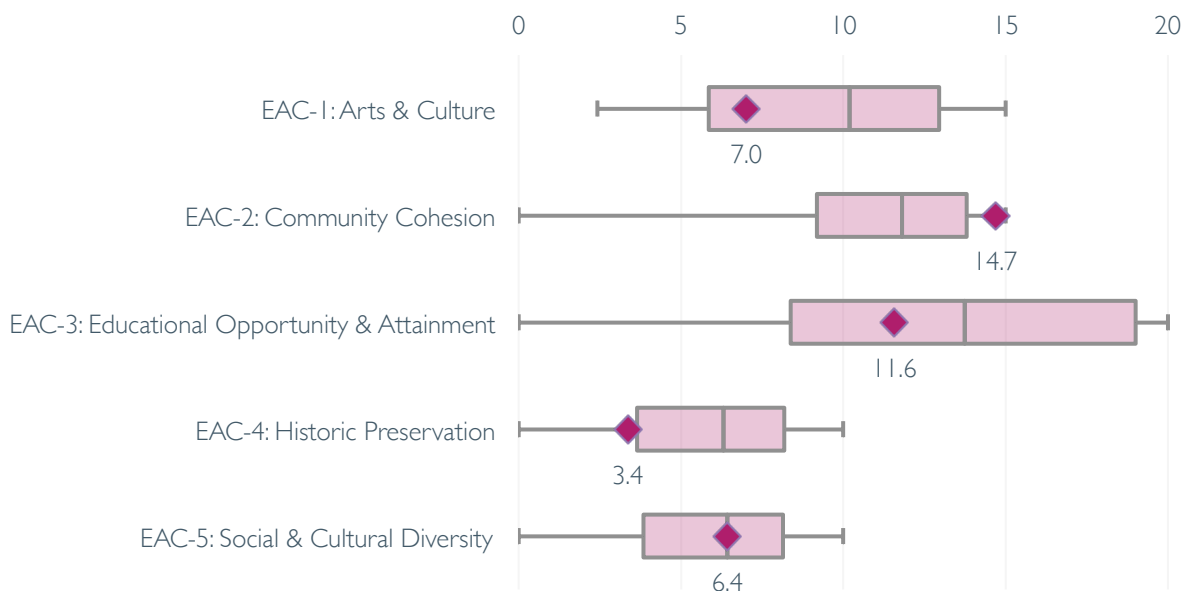


EDUCATION, ARTS & COMMUNITY Comparative Analysis

The graphs below show how Columbus' Education, Arts & Community total and objective scores compare to those from other certified communities. In most of the objectives in this goal area, Columbus fell in the median range box, between the 25th and 75th percentile. The City fell in the bottom 25th percentile in EAC-4: Historic Preservation and the top 25th percentile in EAC-2: Community Cohesion. Columbus is also in the bottom 50th percentile for EAC-1: Arts & Culture and EAC-3: Educational Opportunity & Attainment.



Graph 14: Columbus' Education, Arts & Community total score in blue, as compared to all Certified STAR Communities.



Graph 15: Columbus' objective scores for Education, Arts & Community, as indicated by diamonds, overlaid on top of the combined percentile scores of all certified communities.





EQUITY & EMPOWERMENT

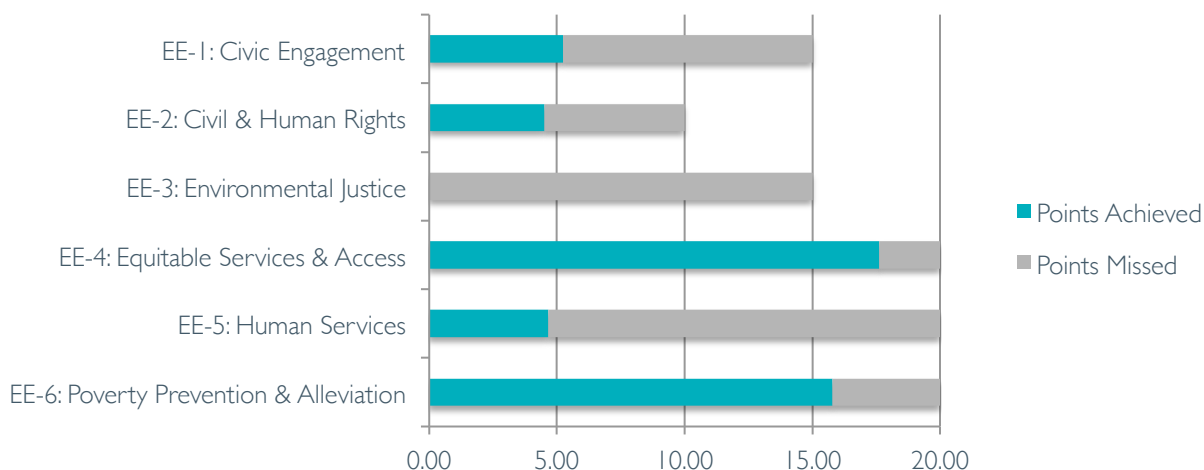
Overview

The six objectives in STAR's Equity & Empowerment goal area promote equity, inclusion, and access to opportunity for all residents.

OBJECTIVE	PURPOSE & INTENT	AVAILABLE POINTS
EE-1	Civic Engagement: Improve community well-being through participation in local decision-making and volunteering with community organizations	15
EE-2	Civil & Human Rights: Promote the full enjoyment of civil and human rights for all residents in the community	10
EE-3	Environmental Justice: Reduce polluted and toxic environments with an emphasis on alleviating disproportionate health hazards in areas where low-income residents and persons of color live	15
EE-4	Equitable Services & Access: Ensure equitable access to foundational community assets within and between neighborhoods and populations	20
EE-5	Human Services: Ensure high quality human services programs are available and utilized to guarantee basic human needs so that all residents lead lives of dignity.	20
EE-6	Poverty Prevention & Alleviation: Prevent people from falling into poverty and proactively enable those who are living in poverty to obtain greater, lasting economic stability and security	20

Table 8: Objectives within Equity & Empowerment and their associated points.

Columbus achieved 47.9 out of 100 points in Equity & Empowerment, the City's lowest scoring goal area. Most points came from EE-4: Equitable Services & Access and EE-6: Poverty Prevention & Alleviation. All other objectives offer significant opportunity for Columbus to improve.



Graph 16: Columbus' Equity & Empowerment performance by objective.





EQUITY & EMPOWERMENT

Objective Analysis

EE-1: CIVIC ENGAGEMENT

5.3/15 points

Columbus did not meet the thresholds for any of the outcome measures, which look at voting participation, volunteerism, and sense of empowerment. The City does work to incorporate citizen requests into local government decision making through the eleven *Neighborhood Liaison* advocates that work directly between neighborhood groups and local government departments.

To improve, the City could adopt a policy to encourage diversity in local boards and provide guidelines and training to local government departments on how to best engage citizens.

EE-2: CIVIL & HUMAN RIGHTS

4.5/10 points

Columbus did not submit data for the outcome measure, which asks communities to demonstrate that all civil and human rights complaints in the jurisdiction have been addressed in a timely and appropriate manner. The City did receive credit for five of the seven action measures however.

Columbus' *Community Relations Commission* investigates discrimination complaints and is supported by *Chapter 2331 - Discriminatory Practices; Civil Rights; and Disclosure*, which protects residents from discriminatory practices in areas such as fair housing. To go further, the City could establish a human rights commission and Operationalize the local government's civil and human rights policies in programs, services, and operations.

EE-3: ENVIRONMENTAL JUSTICE

0/15 points

Columbus did not pursue any of the measures in EE-3. The City should begin by assessing whether there are any brownfields or other sites in the community with disproportionate health impacts on low-income populations or people of color.

If there are environmental justice sites present in the community, the City could form an *Environmental Justice Collaborative Group* to determine, assess, and develop strategies to address each of the specific sites. In addition, the City might work with state agencies to address the pollution or toxins present.

EE-4: EQUITABLE SERVICES & ACCESS

17.6/20 points

The intent of EE-4 is to demonstrate that all populations and neighborhoods have equitable access to vital services and community assets. Columbus did receive partial credit for the outcome measure of this objective, which requires a spatial analysis of access to services, and they received credit for six of the eight actions.

To improve, the City could develop and adopt an equity plan to evaluate current conditions and establish targets to improve access to services, or adopt an equity or social justice policy that establishes a clear commitment to equity in local government decision-making, activities, and investments





EQUITY & EMPOWERMENT

Objective Analysis, continued

EE-5: HUMAN SERVICES

4.7/20 points

Columbus only submitted data for three action measures in this objective, including *The Columbus Health Needs Assessment*, multiple educational campaigns about human services, and *HandsOn Central Ohio*, an organization that helps to coordinate and support communities in critical need.

To improve, the City could consider adopting a human services plan, establishing an advisory committee to advise departments on the needs of target populations, and provide training to human services employees to help them best perform their duties.

EE-6: POVERTY PREVENTION & ALLEVIATION

15.8/20 points

Columbus received credit for one of the two outcome measures, which asks communities to show a reduction in poverty levels within certain priority population subgroups. Columbus demonstrated a 6.47% reduction for the Asian subgroup, 5.13% reductions for Seniors 65+, and 1.27% reduction for those with a disability.

Columbus provides additional support to low-income households through discounted water and sewer programs. Additionally, the *Furniture Bank of Central Ohio* provides free furniture. The City could adopt a community-wide plan to reduce poverty and develop partnerships between the local government and local nonprofits that work on poverty reduction.

EQUITY & EMPOWERMENT HIGHLIGHTS:

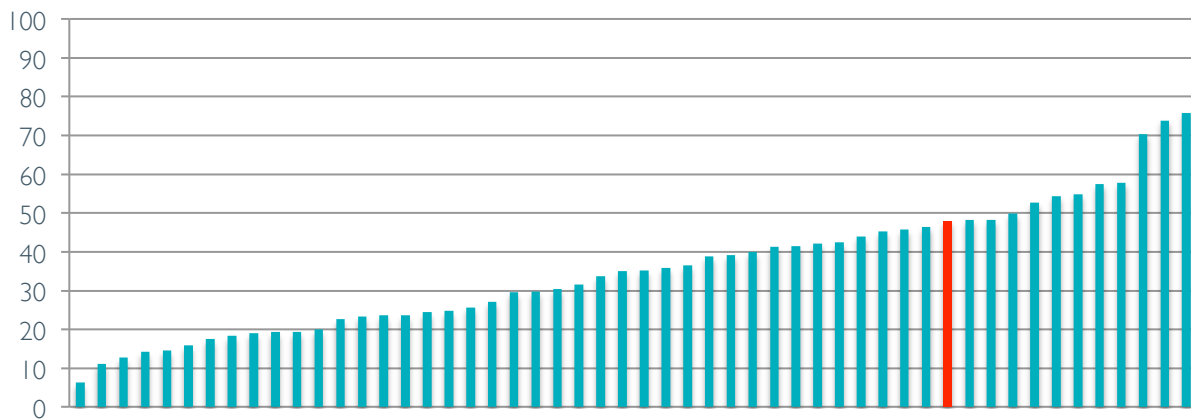
- **II** Neighborhood Liaisons work between the local government and neighborhood associations to ensure that citizens' voices are heard
- Over **5,900 households** participate in the Low Income Sewer and Water Discount Program



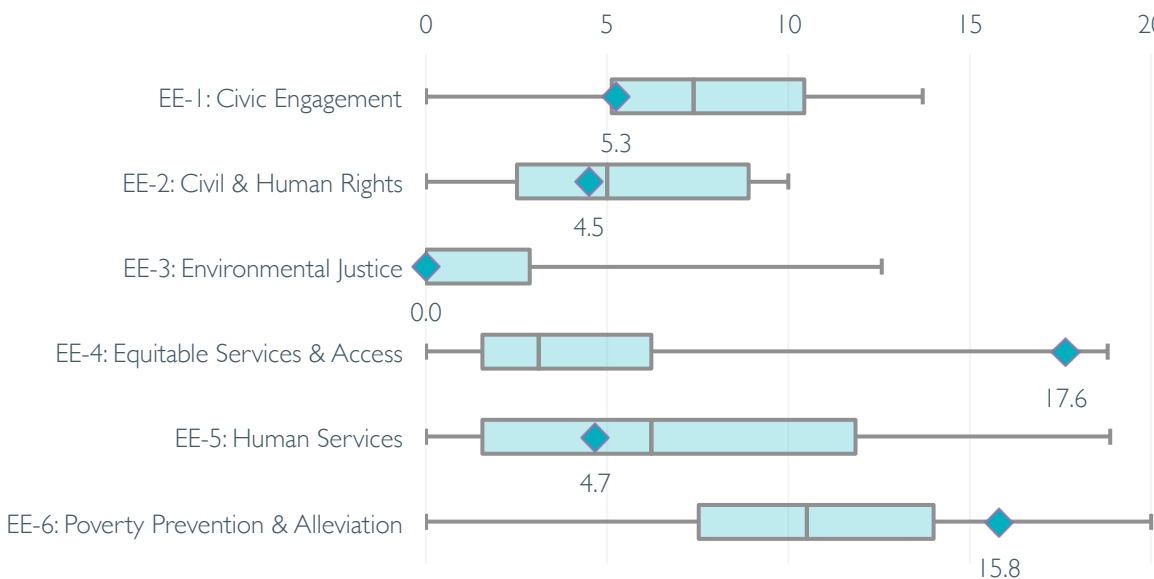


EQUITY & EMPOWERMENT Comparative Analysis

The box-and-whisker graph below shows how Columbus' Equity & Empowerment objective scores compare to those from other certified communities. This is a goal area that many communities score low in, but as the graph below shows, Columbus falls on the higher end of the certified communities. Columbus is in the top 25th percentile EE-4: Equitable Services & Access and EE-6: Poverty Prevention and Alleviation. There is opportunity for improvement across the board, especially in EE-3: Environmental Justice.



Graph 17: Columbus' Equity & Empowerment total score in red, as compared to all Certified STAR Communities.



Graph 18: Columbus' objective scores for Equity & Empowerment, as indicated by diamonds, overlaid on top of the combined percentile scores of all certified communities.





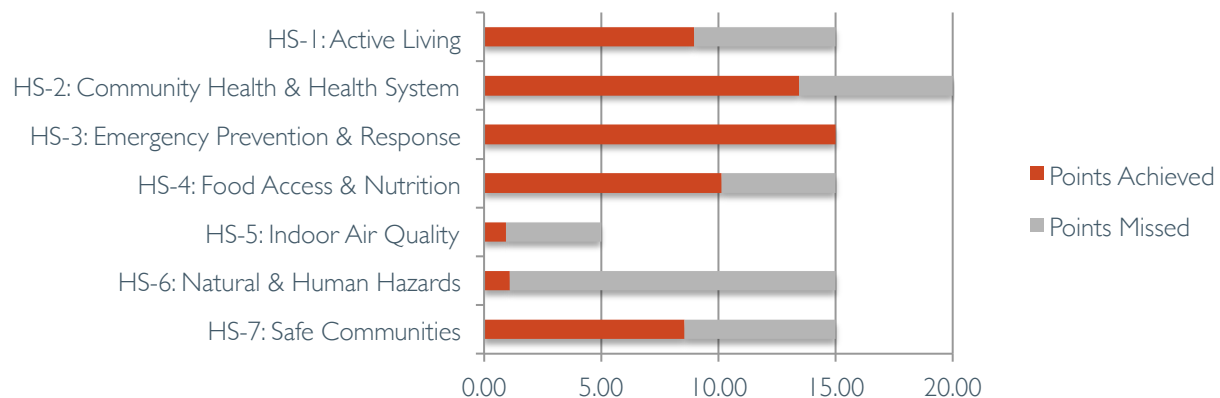
HEALTH & SAFETY Overview

The seven objectives in STAR's Health & Safety goal area recognize that the development of healthy, safe, and resilient communities requires proactive efforts to prevent disease, injury, and premature death by fortifying protective factors and reducing risk factors that undermine healthy outcomes.

OBJECTIVE	PURPOSE & INTENT	AVAILABLE POINTS
HS-1	Active Living: Enable adults and kids to maintain healthy, active lifestyles by integrating physical activity into their daily routines	15
HS-2	Community Health & Health System: Achieve positive health outcomes and minimize health risk factors through a high quality local health care system that is accessible and responsive to community needs	20
HS-3	Emergency Prevention & Response: Reduce harm to humans and property by utilizing long-term preventative and collaborative approaches to avoid emergency incidents and minimize their impacts	15
HS-4	Food Access & Nutrition: Ensure that adults and children of all income levels have opportunities to learn about nutritious eating and have physical and economic access to fresh, healthful food	15
HS-5	Indoor Air Quality: Ensure that indoor air quality is healthy for all people.	5
HS-6	Natural & Human Hazards: Reduce vulnerability to all hazards, secure critical infrastructure, and ensure that communities are prepared to effectively respond to and recover from crisis.	15
HS-7	Safe Communities: Prevent and reduce violent crime and increase perceptions of safety through interagency collaboration and with residents as empowered partners	15

Table 9: Objectives within Health & Safety and their associated points.

Columbus achieved 58.1 out of 100 available points in the Health & Safety goal area. The City scored well in multiple objectives, including HS-2: Community Health & Health Systems and HS-3: Emergency Prevention & Response. There is plenty of room for improvement, especially in HS-5: Indoor Air Quality and HS-6: Natural & Human Hazards.



Graph 19: Columbus' Health & Safety performance by objective.





HEALTH & SAFETY

Objective Analysis

HS-1: ACTIVE LIVING

9.0/15 points

Columbus did not meet the thresholds for the outcome measures, which ask communities to demonstrate certain levels of activity for both kids and adults. The City has demonstrated its commitment to active living through several actions, including the *Franklin County Physical Activity Plan*, the CoGo bike share, and the *Safe Streets* ordinance.

To improve, the City could appoint a physical activity specialist to the local health department and create guidelines for active building design.

HS-2: COMMUNITY HEALTH & HEALTH SYSTEMS

13.5/20 points

Partial credit was received on three out of the four outcome measures, for being able to demonstrate that the County is a Top U.S. Performer for Health Behaviors and Clinical Care according to the *County Health Rankings and Roadmaps* issued by the Center for Disease Control and Prevention's National Center for Health Statistics. The fourth outcome asked that the Joint Commission as a top performer recognize at least one hospital; the City had nine hospitals receive this designation between 2011 and 2013.

Several actions support this objective, but to improve, Columbus could conduct health impact assessments for all proposed infrastructure investments and adopt a health-in-all policies commitment.

HS-3: EMERGENCY PREVENTION & RESPONSE

15.0/15 points

Columbus' emergency services are committed to protecting their citizens. The City received full credit in this objective by demonstrating leadership in all three outcome measures. The fire department has received an *ISO Class 3* rating for fire protection and is accredited by the *Commission on Fire Accreditation International (CFAI)*. 90% of emergency response times are compliant with standards set by the *National Fire Protection Association (NFPA)*, and the community is also in compliance with the *National Incident Management System (NIMS)*.

HS-4: FOOD ACCESS & NUTRITION

10.1/15 points

Columbus received credit for two of the four outcome measures in this objective. The City demonstrated a 2.4% increase in residents within a quarter mile walk distance to a fresh food market and an increase of \$118,532.74 in fruit and vegetables sales in schools between 2013 and 2015.

The city is taking several steps to increase access to healthful local food. For example, in 2010 the *Central Ohio Local Food Assessment and Plan* was adopted to help guide policy and programmatic work. In 2015, the City adopted the *Agricultural and Stable Standards* zoning code that allows for gardens in yards and also for residents to lease vacant or abandoned property for community gardens for \$10/year. To improve, the City could adopt zoning to prohibit the sale of unhealthful food and adopt menu-labeling requirements.





HEALTH & SAFETY

Objective Analysis, continued

HS-5: INDOOR AIR QUALITY

0.9/5 points

Columbus did not submit for either of the two outcome measures, which ask communities to address indoor air quality complaints in schools and within the broader community. The City does have action measures in place, such as the *Ohio Smoke Free Workplace Law* and the *Smoke-Free Housing Toolkits* and other resources for landlords that offer smoke-free housing.

To improve in this objective, the City could begin to track indoor air quality complaints and how they are addressed.

HS-6: NATURAL & HUMAN HAZARDS

1.1/15 points

No outcome measures were submitted for this objective, which asks the community to identify the main hazards faced by the community and to reduce the number of homes and residents exposed to these hazards, as well as demonstrate increased community resilience to natural hazards.

The City received credit for the *Franklin County Natural Hazards Mitigation Plan*, which identifies potential hazards such as failing infrastructure and debris along streams. To improve, the City could use regulatory approaches to limit development in high hazard areas.

HS-7: SAFE COMMUNITIES

8.6/15 points.

Columbus did not submit for the outcome measures in this objective, which ask communities to meet STAR thresholds for violent crime rates and school violence rates.

However, Columbus works hard to create a safe community, as seen in the completion of six out of eleven actions. The City conducts community surveys on local perceptions of safety, collects data on community needs through the *HandsOn Central Ohio* program, provides behavioral group therapy services, and has helped 115 participants in its *Restoration Academy* reentry program for ex-offenders. To improve, a good first step could be to develop a safe communities strategic plan.

HEALTH & SAFETY

HIGHLIGHTS:

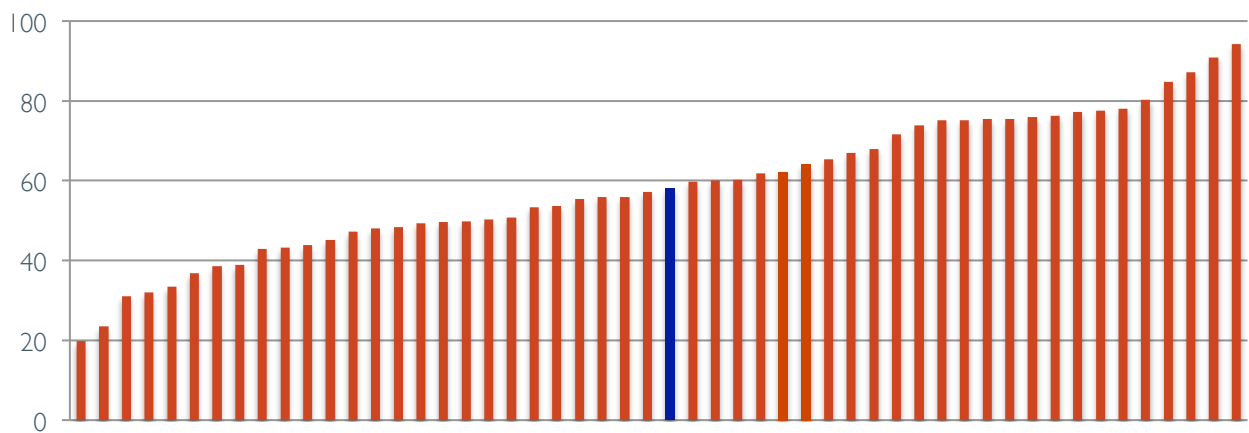
- CoGo bike sharing program has **300 bicycles at 30 bicycle stations**
- **9 hospitals** are recognized as Top Performers by the Joint Commission
- Increase of **\$118,532** in fruit and vegetables sales in schools between 2013 and 2015





HEALTH & SAFETY Comparative Analysis

The graphs below show how Columbus' Health & Safety total score and objective scores compare to those from all other certified communities. One objective scored in the top 25th percentile, HS-3: Emergency Prevention & Response, but five objectives fell in the bottom 50th percentile, with one in the bottom 25th percentile, HS-6: Natural & Human Hazards. This shows there is plenty of opportunity for improvement in this goal area.



Graph 20: Columbus' Health & Safety total score in blue, as compared to all Certified STAR Communities.



Graph 21: Columbus' objective scores for Health & Safety, as indicated by diamonds, overlaid on top of the combined percentile scores of all certified communities.





NATURAL SYSTEMS

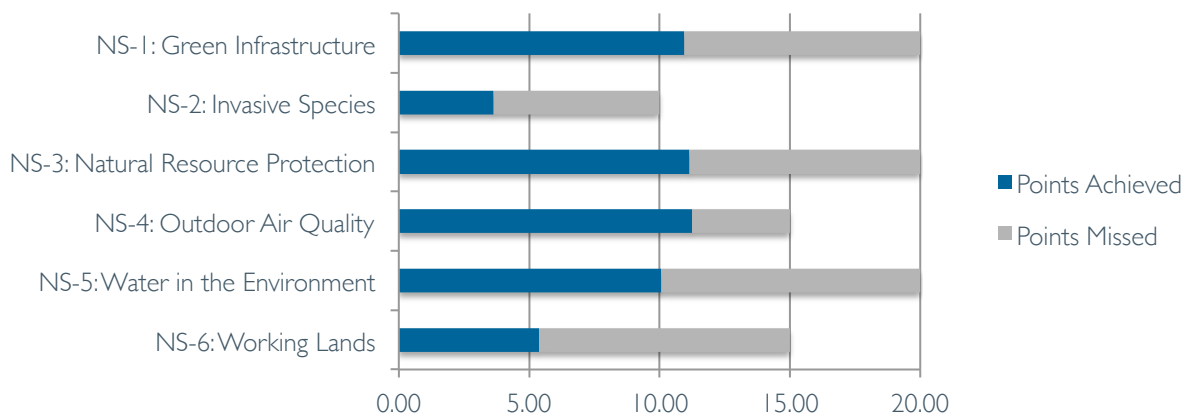
Overview

The six objectives in the Natural Systems goal area help communities protect and restore the places that provide resources to support life. The goal area takes an ecosystem services approach and recognizes the wide range of benefits natural systems provide, such as food, water, and natural regulating processes affecting climate and floods.

OBJECTIVE	PURPOSE & INTENT	AVAILABLE POINTS
NS-1	Green Infrastructure: Design and maintain a network of green infrastructure features that integrate with the built environment to conserve ecosystem functions and provide associated benefits to human populations	20
NS-2	Invasive Species: Prevent and manage invasive species in order to restore and protect natural ecosystems and the benefits they provide	10
NS-3	Natural Resource Protection: Protect, enhance and restore natural ecosystems and cultural landscapes to confer resilience and support clean water and air, food supply, and public safety	20
NS-4	Outdoor Air Quality: Ensure that outdoor air quality is healthy for all people and protects the welfare of the community	15
NS-5	Water in the Environment: Protect and restore the biological, chemical, and hydrological integrity of water in the natural environment	20
NS-6	Working Lands: Conserve and maintain lands that provide raw materials in ways that allow for sustained harvests and preserves ecosystem integrity	15

Table 10: Objectives within Natural Systems and their associated points.

Columbus achieved 52.4 of the 100 available points in Natural Systems goal area. The City did well in NS-1: Green Infrastructure, NS-3: Natural Resource Protection, and NS-4: Outdoor Air Quality. Other objectives, such as NS-2: Invasive Species and NS-6: Working Lands offer plenty of room for improvement.



Graph 22: Columbus' Natural Systems performance by objective.





NATURAL SYSTEMS

Objective Analysis

NS-1: GREEN INFRASTRUCTURE

11.0/20 points

Columbus met one of the two outcome measures by demonstrating that 86.2% residents live within a half mile walk distance from a green infrastructure feature, but did not show that 35% of the City's land area provides a green infrastructure benefit such as localized cooling or enhanced water management.

The City also received credit for over half of the action measures, including the *Green Infrastructure Design Guidelines* and the *GreenSpot Backyard Program* that incentivizes rain gardens, composting, and rain barrels. To improve, the City could adopt codes that require green infrastructure in certain developments.

NS-2: INVASIVE SPECIES

3.6/10 points

No outcome measures were pursued in NS-2, which ask communities to track and report data for invasive species prevention, containment, and eradication. There are efforts to eradicate and control invasive species, such as the *Columbus Ecological Restoration Program*, which partners with volunteers to educate residents about invasive species and remove them from Columbus' parks.

To improve, the City could adopt a robust and comprehensive invasive species plan, regulate the sale of non-native plants, and adopt a native plant ordinance.

NS-3: NATURAL RESOURCE PROTECTION

11.1/20 points

Columbus submitted data for only one of the outcome measures, which require communities to set preservation targets for natural areas, to preserve wetlands, to connect existing natural areas, and to restore natural areas. The city received credit for showing no-net-loss of streams and wetlands and that stream buffers have increased by over 300 kilometers since 2007.

A major component to the progress in this objective is the *Stormwater Policy and Facility Design Criteria* adopted in 2012, which defines a stream corridor protection zone based on the FEMA 100 year floodway.

To improve and protect all natural resources, the City could adopt a comprehensive natural resources conservation and protection plan.

NS-4: OUTDOOR AIR QUALITY

11.3/15 points

The City received partial credit in the one outcome by demonstrating a decrease in the annual concentration of the non-attainment criteria pollutants that have the greatest impacts on public health—PM 2.5, PM 10, and ozone. The City also showed a decrease in the number of days that air quality index exceeds 100.

The City works to improve outdoor air quality through bike infrastructure upgrades, educational campaigns, and the promotion of ridesharing. To improve, the City could continue to increase public transit ridership, as well as incentivize dense mixed used developments and adopt advanced parking strategies.





NATURAL SYSTEMS

Objective Analysis, continued

NS-5: WATER IN THE ENVIRONMENT

10.1/20 points

Columbus did not submit data for any of the outcome measures that look at hydrological integrity, biological integrity, or chemical integrity of the water bodies. Credit was received in five of the eight actions.

The City could develop and adopt a watershed management plan to address the needs of the community's water bodies and strategically improve their health, develop partnerships to address non-point source water pollution, and incentivize residents and developers to protect watersheds.

NS-6: WORKING LANDS

5.4/15 points

Columbus received credit for one of the two outcome measures by showing an 80% increase in certified sustainable harvesters between 2006 and 2015. Groups like the *Ohio Ecological Food and Farm Association* support a local sustainable agriculture system.

To improve, the City could work with local landowners to develop and implement appropriate best management practices.

NATURAL SYSTEMS HIGHLIGHTS:

- **1,729 projects** have been registered through the *GreenSpot Incentive Program*, including rain barrels, composting bins, and rain gardens
- Stream buffers have increased by over **300 kilometers** between 2007 and 2012
- **80%** increase in certified sustainable harvesters between 2006 and 2015

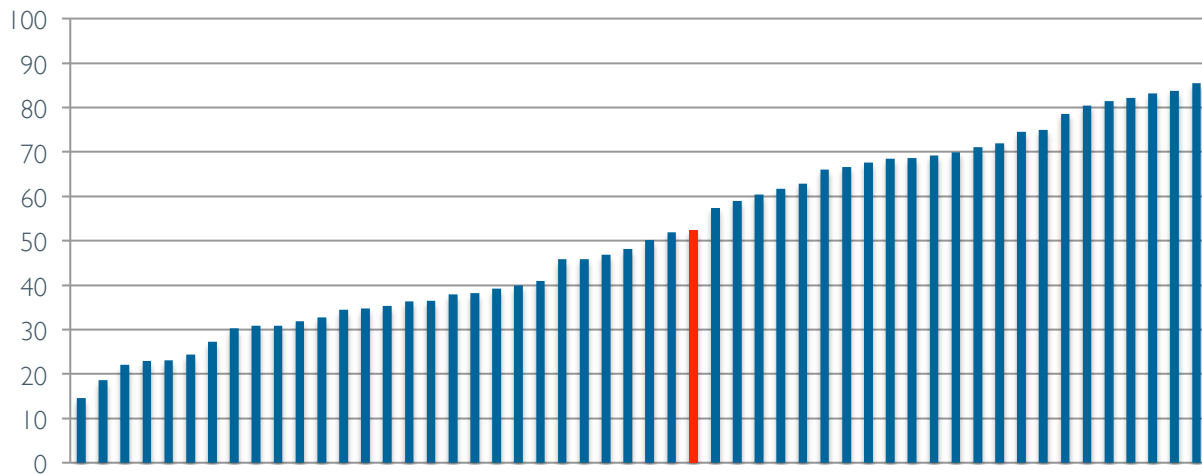




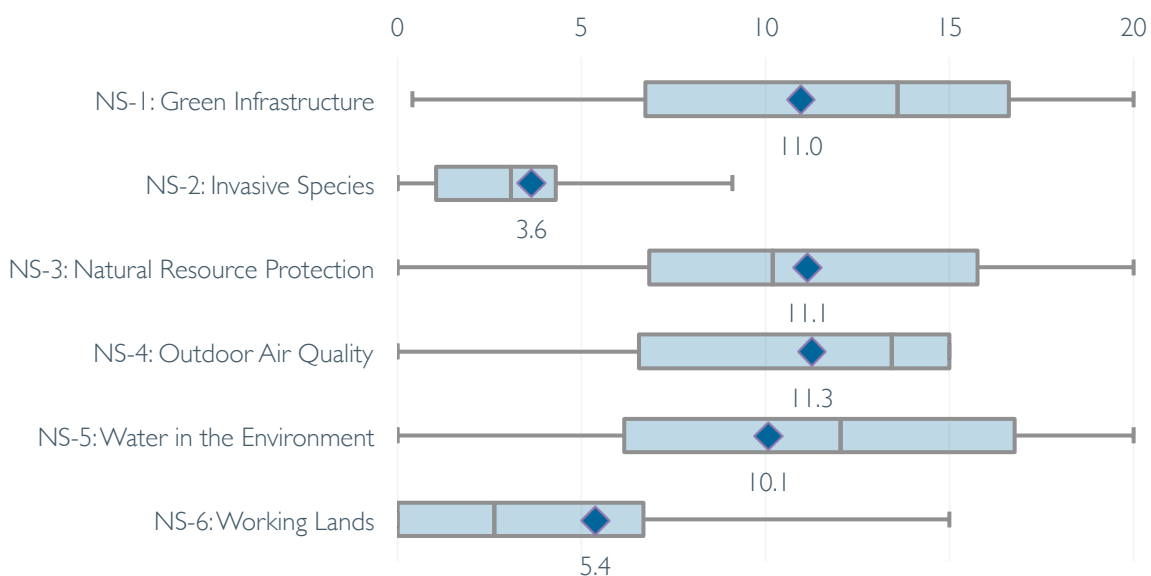
NATURAL SYSTEMS

Comparative Analysis

The graphs below show how Columbus' Natural Systems total score and objective scores compare to those from other certified communities. Columbus scored in the median range box for all the objectives, with three in the bottom 50th percentile and three in the top 50th percentile. There is ample opportunity to improve in all of the objectives moving forward.

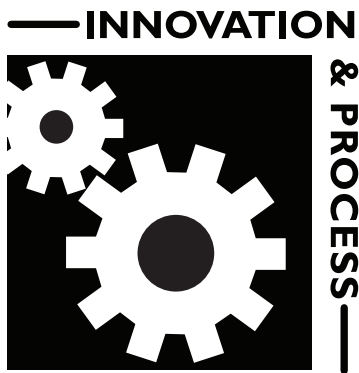


Graph 23: Columbus' Natural Systems total score in red, as compared to all Certified STAR Communities.



Graph 24: Columbus' objective scores for Natural Systems, as indicated by diamonds, overlaid on top of the combined percentile scores of all certified communities.





INNOVATION & PROCESS

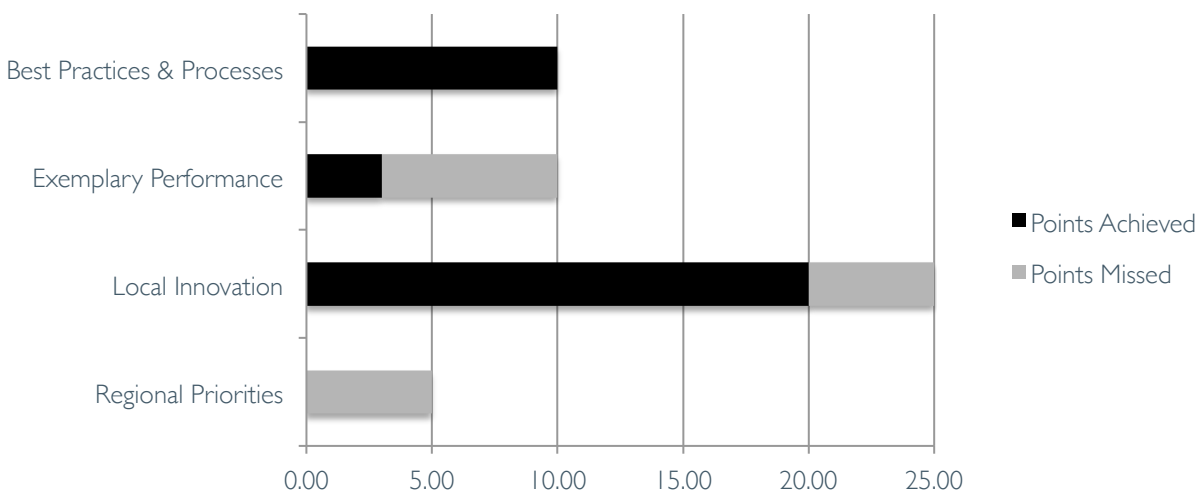
Overview

The Innovation & Process category is an avenue for discovering emerging and leading edge practices that communities are implementing to improve sustainability outcomes.

OBJECTIVE	PURPOSE & INTENT	AVAILABLE POINTS
IP-1	Best Practices & Process: Recognize important local government practices and processes that underpin the implementation of sustainability measures and accelerate community-scale achievement across STAR goal areas	10
IP-2	Exemplary Performance: Reward performance in community level outcome measures that significantly exceeds the evaluation criteria established by the existing STAR Community Rating System	10
IP-3	Local Innovation: Encourage and reward creative, effective approaches to enhancing a community's environmental, social and/or economic sustainability not reflected in existing STAR objectives or evaluation measures	25
IP-4	Regional Priorities: Encourage coordinated regional action on the sustainability issues of greatest importance to the region in which the jurisdiction resides	5

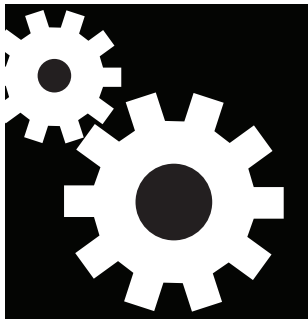
Table 11: Thematic areas within Innovation & Process and associated points.

Columbus achieved 33 of the 50 available points by receiving credit in three of the Innovation & Process credit areas, but especially in Local Innovation and Best Practices & Processes.



Graph 25: Columbus' Innovation & Process scores.





INNOVATION & PROCESS

Objective Analysis

IP-1: BEST PRACTICES & PROCESS

10/10 points

IP-1 looks for best practices and innovative strategies in comprehensive planning, public engagement, and codes and ordinances. Columbus received credit by demonstrating best practices in comprehensive planning and public engagement.

For comprehensive planning, the City discussed practices employed while developing the new sustainability plan. To gather public comments, the City used *Speak Up* comment boxes, and spent a year developing the plan, which has nine broad goal areas. Several of these goal areas align directly with STAR's goals and this is reflected in measures that were submitted for Climate & Energy, Built Environment, and Equity & Empowerment.

For public engagement, the City discussed how utilization of surveys affected the performance in STAR's Built Environment and Climate & Energy goal areas.

IP-2: EXEMPLARY PERFORMANCE

3/10 points

IP-2 aims to reward communities for going above and beyond the national standards required by the STAR outcome measures. Columbus submitted their exemplary performance in CE-4: Industrial Sector Resource Efficiency for credit. The outcome asks for communities to demonstrate incremental progress towards achieving an 80% reduction by 2050 in the energy use of industrial sector operations. Columbus has been reducing its industrial energy use increasingly since 2012. Most recently, the industrial sector has seen a 10.71% reduction in energy use, well above the 2.1% that would have been required by STAR for credit on the measure.

IP-3: LOCAL INNOVATION

20/25 points

The intent of IP-3 is for communities to submit new or innovative evaluation measures and methodologies that could eventually fit into the STAR framework.

Columbus submitted four new measures under IP-3: one action, one objective and two outcomes. The one action falls under the Climate & Energy goal area and focuses on surveying the community's opinions of climate change.

The proposed objective focuses on *Proactive Engineering* which asks a community to show that it proactively invests in the future of the engineered infrastructure.

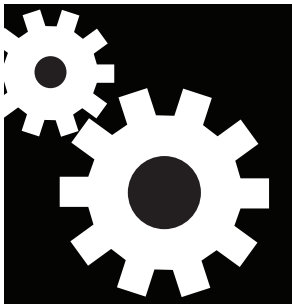
The proposed outcomes are in the Economy & Jobs goal area. They examine a community's performance in broadband and the community's bond rating.

IP-4: REGIONAL PRIORITIES

0/5 points

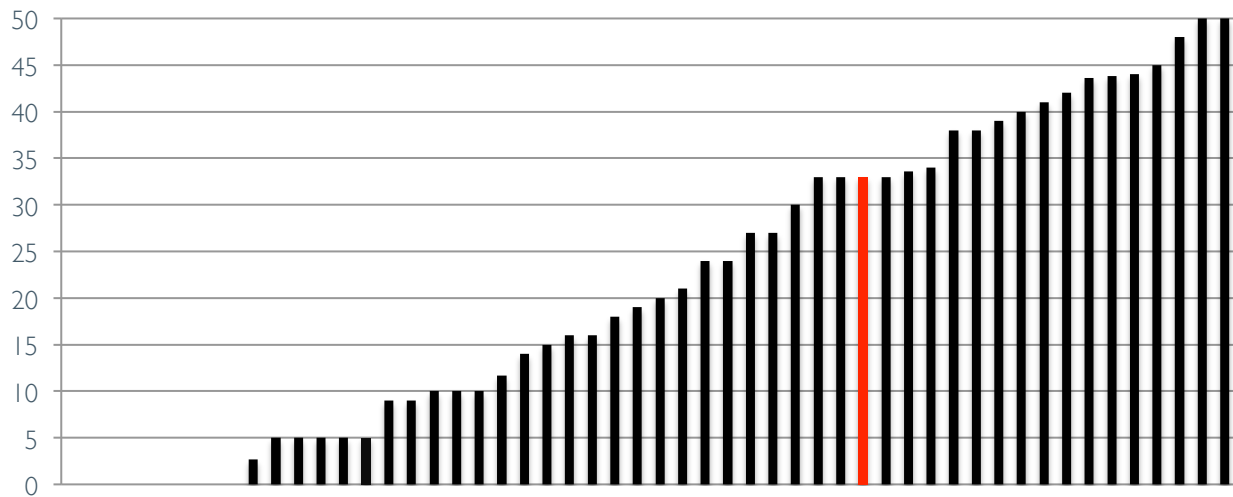
Columbus did not submit for IP-4, which asks communities to submit examples of regional collaboration.



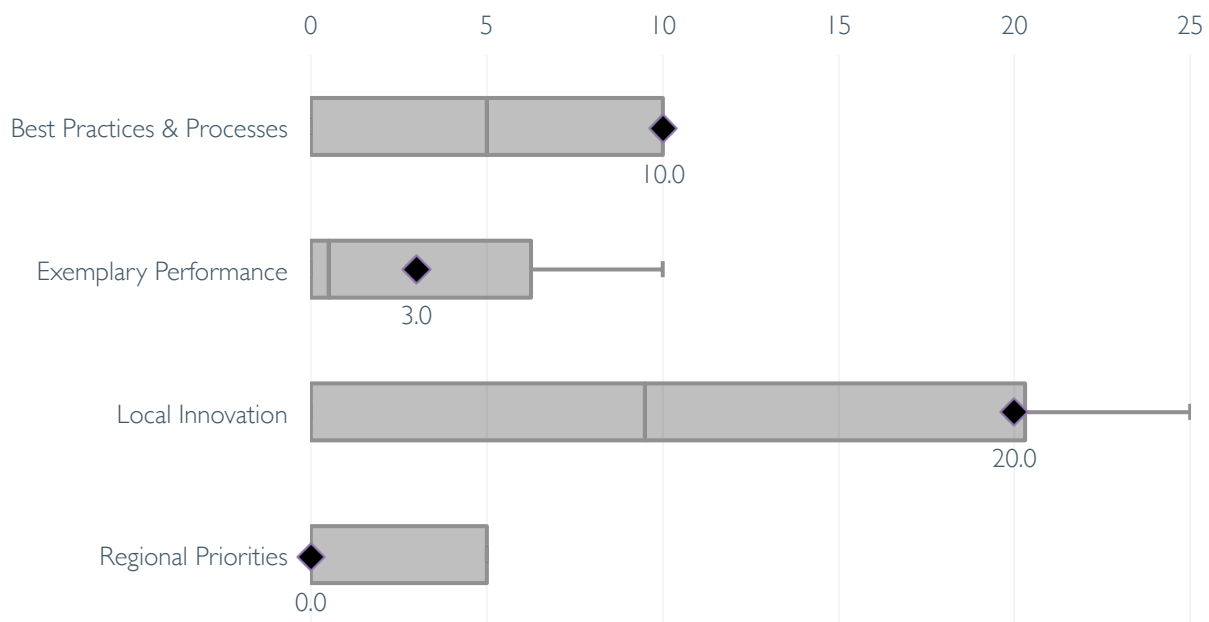


INNOVATION & PROCESS Comparative Analysis

The graphs below show how Columbus' Innovation & Process scores compare to those from other certified communities. Columbus fell towards the middle of the score spectrum. The City was in the higher percentiles for IP-1 and IP-3.



Graph 26: Columbus' Innovation & Process total score in red, as compared to all Certified STAR Communities.



Graph 27: Columbus' Innovation & Process scores, as indicated by diamonds, overlaid on top of the combined percentile scores of all certified communities.



NEXT STEPS

Certification isn't the end of Columbus' STAR Journey. The results of the assessment should provide insight to the current state of sustainability and ideas for improvement and next steps.

BENEFITS OF STAR CERTIFICATION

Communities join STAR for mainly reasons and report a variety of benefits from STAR Certification. These can help to communicate the value of STAR Certification and provide ideas for how to use Columbus' STAR rating going forward.

Communities who achieve certification under the STAR Community Rating System are:

- Aligning local plans and priorities with a national sustainability framework
- Strengthening local metrics
- Demonstrating a commitment to data-driven performance management
- Increasing transparency and accountability through public-facing reporting
- Gaining competitive advantage to attract funding
- Catalyzing action in implementing solutions and best practices for sustainability
- Communicating resilience and risk management to municipal bond agencies
- Integrating health and equity into existing sustainability or environmental efforts
- Strengthening civic, university, and governmental partnerships throughout the community
- Building and branding a culture of local sustainability
- Improving sustainability communication and education
- Identifying gaps and prioritize future investment
- Celebrating local progress and achieve national recognition

STRATEGIES FOR IMPROVEMENT

In order to improve a STAR Rating, STAR Communities recommends that the local government perform either a gaps analysis or a strengths, weaknesses, opportunities and threats (SWOT) analysis. Some tips for how to start:

1. Look at the objectives with lower scores.
2. Ascertain why points were missed. Some possibilities:
 - a. The data wasn't available.
 - b. The data was available, but had not been tracked for long enough to demonstrate a trend line.
 - c. The data was available, but did not meet the STAR trend line or threshold requirement.
 - d. The outcome wasn't a community priority for reporting.
 - e. Didn't have GIS analysis capability or another required skillset to complete the analysis.
 - f. Couldn't find the correct data holder.
3. Prioritize measures for future tracking based upon existing community plans and needs assessments.
4. Identify opportunities for future actions, such as new policies or programs.
5. Develop a plan and timeline for the new actions and measures.
6. Develop community working groups or committees to assist in implementation, or task a green team or other existing sustainability group with aiding in implementation.
7. Consider embedding STAR metrics into annual reports, plans, and local government decision-making processes.

